

## 1 SERIES STYLE

P = Plastic Fiber Family

## 2 FUNCTION MODE:

T = Opposed Mode (Individual Fiber) D = Diffuse Mode (Bifurcated Fiber)



## 3 HOUSING STYLE:

M = Threaded D = Smooth

## 4 HOUSING DISTANCE:

1.5=1.5mm 2.3=2.3mm 2.5=2.5mm  
3 = 3mm 4 = 4mm 6 = 6mm 14=14mm

## 5 SENSING END DESIGNATOR:

T = Threaded P = Probe A = Angled F = Ferruled



V = Probe Side View W = Probe Side View B = square side sensing R = rectangular



C = square top sensing D = Fixed-focus reflective type E = Fixed-focus reflective type G = Fixed-focus reflective type Y = Fixed-focus reflective type LE = Easy mounting side sensing



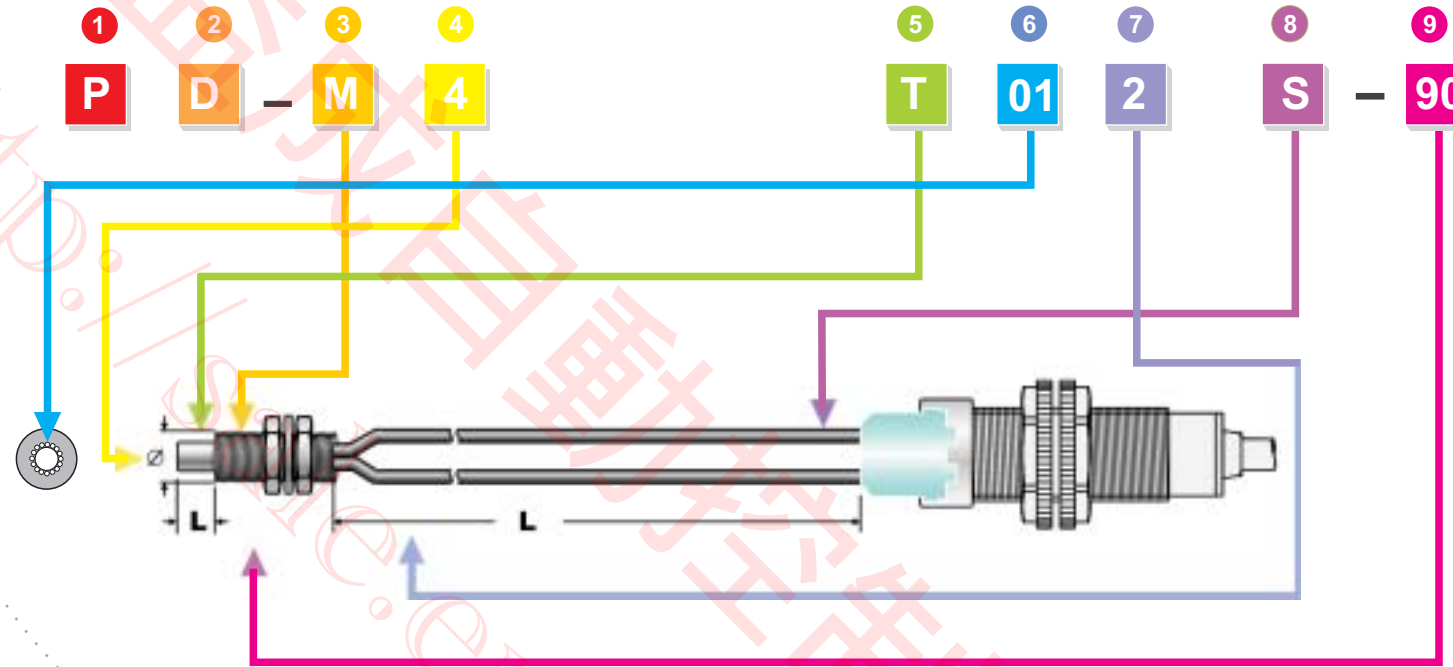
S = Slot sensor H = Bifurcated rectangular, side-view WB = Wide beam I = Fixed-focus reflective type J = Fixed-focus reflective type K = Fixed-focus reflective type



L = Easy mounting side sensing M = Easy mounting top sensing N = Wide area sensing O = Wide area sensing U = Easy mounting top sensing



X = Individual rectangular array Z = Contact type CO = Clamp-on type liquid-level detector Q = Slot sensor right-anger fiber MO = Mountable on pipe



## 6 CORE FIBER DIAMETER:

01=1.0	02=2.0	03=2.5	04=0.5	05=1.5
06=0.25	07=0.55	08=0.125	09=1.1	10=10.0
11=1.2	12=0.75	13=0.8	14=1.0x2	15=0.5x2
16=0.125x2	17=1.5x2	18=1.8x1	19=0.265x16	
20=0.25x4	21=0.25x16+1.0x1	22=0.265x9+0.5x1		
23=0.265x9+1.0x1	24=0.265x16+0.265x16			
25=0.25x2+0.25x2	26=0.265x32	27=0.125x9+0.265x1		
28=0.265x9+0.5x1	29=0.5x5+0.5x1	30=1.6x1+1.1x1		
31=2.2+1.3	32=0.25x7	33=0.265	34=0.25x7+0.25x7	
35=0.175x6+0.175x1	36=0.125x6+0.125x1	37=0.25x9+0.25x9		
38=0.25x9+0.5x1	39=0.25x2	40=50μmx380+50μmx380		
41=50μmx400+50μmx400	42=0.5+0.25x4	43=0.265x16+1		
44=0.25x9+0.5	45=6.0	46=3.0	47=4.75	
48=1 acrylic lens	49=L2 lens	50=L2RA	51=20x25x3.2	
52=0.125x4	53=2.2	54=14.2x19x5	55=25x13x20	
56=2x0.75	57=6x18x14	58=26.2x14.5x6.4		
59=5x69x20	60=4..2x31x13.5	61=3x8x12		
62=8.5x12x3	63=3x12x3	64=5x15x15		
65=19x27x5	66=2x1.5x20	67=7x15x13		
68=5.2x9.5x15	69=24x21x4	70=15x19x3		
71=7x15x30	72=5x20x20	73=17x29x3.8		

## 7 FIBER LENGTH:

2 = 2m 1=1m 0.5 = 0.5m T = other length

## 8 CONTROL END DESIGNATOR:

S = Unterminated Straight Cable C = Unterminated Coiled Cable

## 9 THE LENGTH OF PROBE OR THREAD

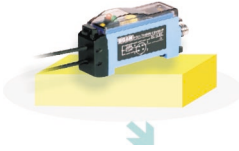
90 = 90 mm 15 = 15 mm 5 = 5 mm Blank = Not is probe type A=3+12mm B=2.5+10mm C=5+10mm  
D=3+15mm E=3+11 F=3+17 G=3+17mm H=5+12 J=5+15 K=2+20 L=3+10.9

### Plastic Fiber Optics Product Specifications

- Sensing Range:**  
Refer to the excess gain curves for the fiber optic sensor to be used.
- Construction:**  
Optical Fiber: acrylic monofilament.  
Protective Jacket: black polyethylene.  
Threaded End Tips and Hardware: nickel-plated brass.
- Minimum Bend Radius:**  
8mm for 0.25 mm diameter fibers.  
12 mm for 0.5 mm diameter fibers.  
25 mm for 1.0 mm diameter fibers.  
38 mm for 1.5 mm diameter fibers.
- Repeat Bending/Flexing:**  
Life expectancy of plastic fiber optic cable is in excess of one million cycles at bend radii of no less than the minimum and a bend of 90° or less. Avoid stress at the point where the cable enters the sensor ("control end") and at the sensing end tip. Coiled plastic fiber optic assemblies are recommended for any application requiring reciprocating fiber motion.

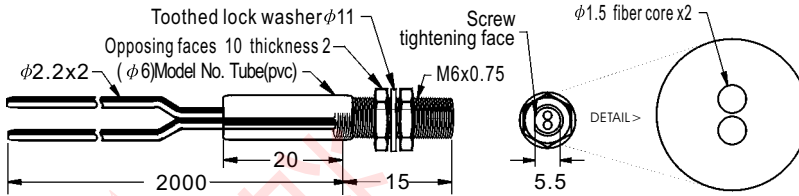
# Plastic Fibers

## Diffuse Mode Bifurcated Cables



### PD-M6T172S

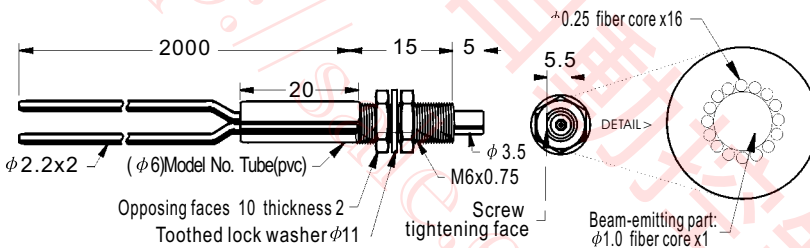
#### Dimensions (mm)



- Shape of fiber head: M6(standard)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi 0.02$  gold wire
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 480     | 80       | 42        | 26           |
| ● S T D: | 220     | 40       | 21        | 13           |
| ● FAST:  | 160     | 26       | 14        | 9            |
| ● S - D: | 75      | -        | -         | -            |
- Allowable bending radius: R25

### PD-M6P212S-5

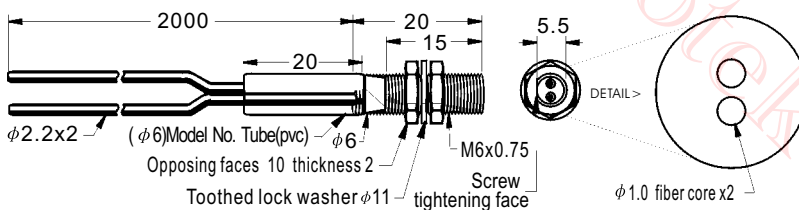
#### Dimensions (mm)



- Shape of fiber head: M6 (standard)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi 0.02$  gold wire
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 310     | 46       | 24        | 20           |
| ● S T D: | 140     | 23       | 12        | 10           |
| ● FAST:  | 100     | 15       | 8         | 7            |
| ● S - D: | 47      | -        | -         | -            |
- Allowable bending radius: R25

### PD-M6T142S-1

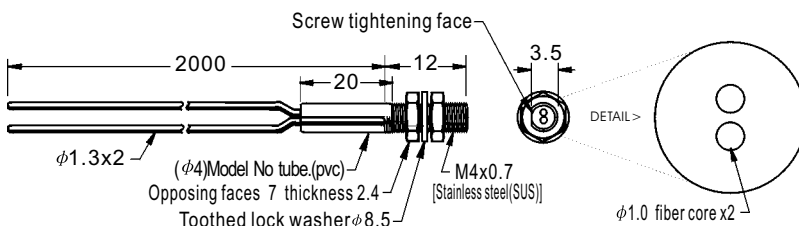
#### Dimensions (mm)



- Shape of fiber head: M6 (standard)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi 0.02$  gold wire
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 270     | 46       | 42        | 26           |
| ● S T D: | 110     | 23       | 12        | 10           |
| ● FAST:  | 85      | 15       | 8         | 7            |
| ● S - D: | 39      | -        | -         | -            |
- Allowable bending radius: R25

### PD-M4T142S-1

#### Dimensions (mm)



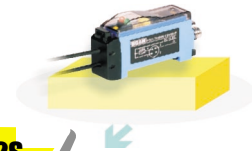
- Shape of fiber head:  $\phi 3$ (small fiber head)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi 0.02$  gold wire
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 270     | 46       | 42        | 26           |
| ● S T D: | 110     | 23       | 12        | 10           |
| ● FAST:  | 85      | 15       | 8         | 7            |
| ● S - D: | 39      | -        | -         | -            |
- Allowable bending radius: R25

- Notes:** 1) The sensing range is specified for white non-glossy paper(100x100mm)as the object.  
 2) please take care that the sensing of the free-cut type fiber may be reduced by 20% max. Depending upon how the fiber is cut.  
 3) The minimum sensing from the rated sensing range.

# Plastic Fibers

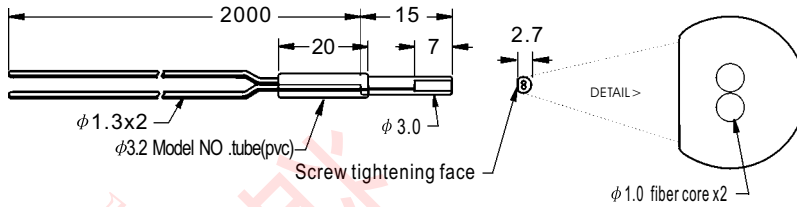
## Diffuse Mode

### Bifurcated Cables



#### PD-D4F142S

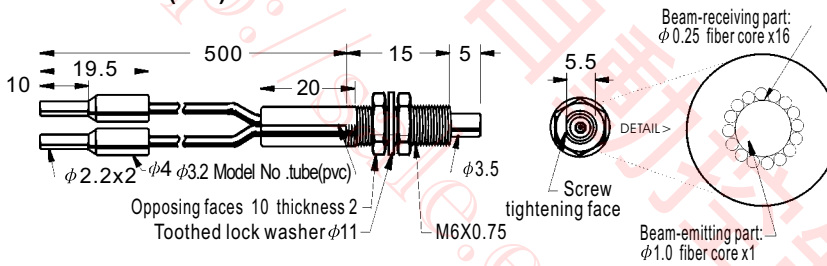
##### Dimensions (mm)



- Shape of fiber head:  $\phi 3$ (standard)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi 0.02$  gold wire
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 270     | 46       | 24        | 20           |
| ● S T D: | 110     | 23       | 12        | 10           |
| ● FAST:  | 85      | 15       | 8         | 7            |
| ● S - D: | 39      | -        | -         | -            |
- Allowable bending radius: R25

#### PD-M6P210.5S-5

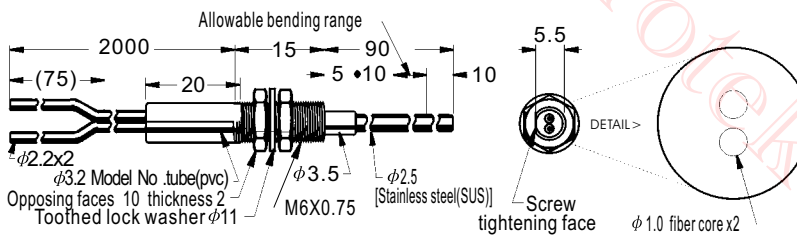
##### Dimensions (mm)



- Shape of fiber head: M6 (standard)
  - Fiber cable length: 500
  - Min.sensing object at the maximum sensitivity:  $\phi 0.02$  gold wire
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 310     | 46       | 24        | 90           |
| ● S T D: | 140     | 23       | 12        | 45           |
| ● FAST:  | 100     | 15       | 8         | 30           |
| ● S - D: | 47      | -        | -         | -            |
- Allowable bending radius: R25

#### PD-M6P142S-90

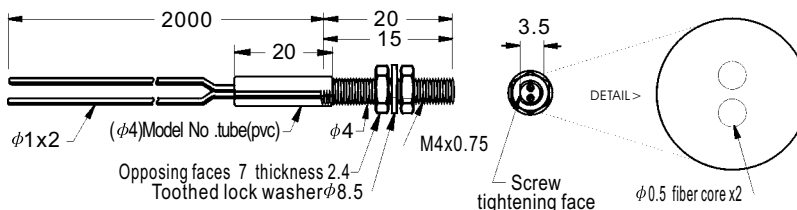
##### Dimensions (mm)



- Shape of fiber head: M6 (standard)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi 0.02$  gold wire
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 270     | 46       | 24        | 20           |
| ● S T D: | 110     | 23       | 12        | 10           |
| ● FAST:  | 85      | 15       | 8         | 7            |
| ● S - D: | 39      | -        | -         | -            |
- Allowable bending radius: Fiber R25  
Sleeve R10

#### PD-M4T152S

##### Dimensions (mm)



- Shape of fiber head: M4 (standard)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi 0.02$  gold wire
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 75      | 16       | 8         | 4            |
| ● S T D: | 38      | 8        | 4         | 2            |
| ● FAST:  | 28      | 5        | 2         | 1.5          |
| ● S - D: | 13      | -        | -         | -            |
- Allowable bending radius: R25

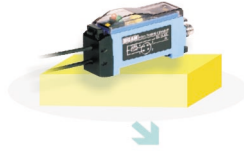
**Notes:** 1) The sensing range is specified for white non-glossy paper(100x100mm)as the object.

2) please take care that the sensing of the free-cut type fiber may be reduced by 20% max. Depending upon how the fiber is cut.

3) The minimum sensing from the rated sensing range.

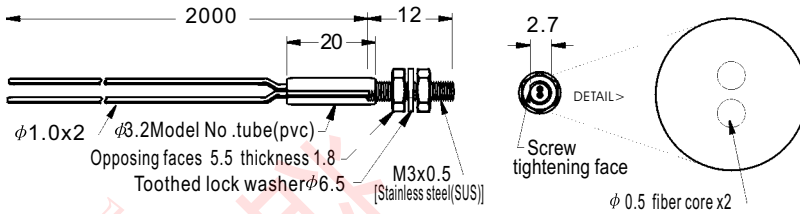
# Plastic Fibers

## Diffuse Mode Bifurcated Cables



### PD-M3T152S-2

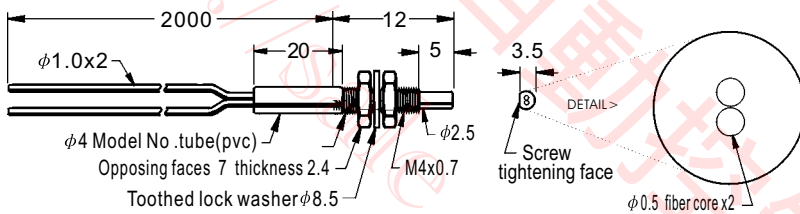
#### Dimensions (mm)



- Shape of fiber head: M3(standard)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi$  0.02 gold wire
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 90      | 16       | 8         | 6            |
| ● S T D: | 45      | 8        | 4         | 3            |
| ● FAST:  | 35      | 5        | 2         | 2            |
| ● S - D: | 16      | -        | -         | -            |
- Allowable bending radius: R25

### PD-M4P152S-5

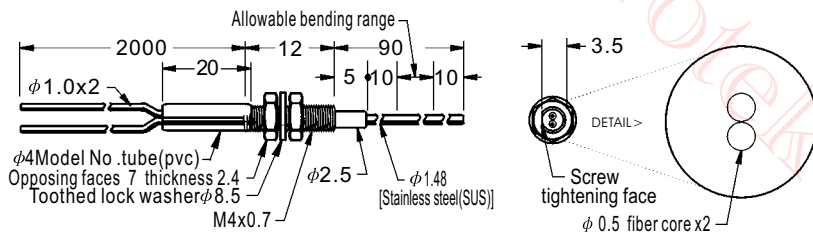
#### Dimensions (mm)



- Shape of fiber head: M3(standard)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi$  0.02 gold wire
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 90      | 16       | 8         | 6            |
| ● S T D: | 45      | 8        | 4         | 3            |
| ● FAST:  | 35      | 5        | 2         | 2            |
| ● S - D: | 16      | -        | -         | -            |
- Allowable bending radius: R25

### PD-M4P152S-90

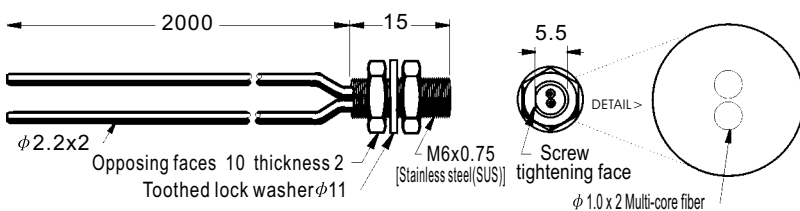
#### Dimensions (mm)



- Shape of fiber head: M4(standard)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi$  0.02 gold wire
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 90      | 16       | 8         | 6            |
| ● S T D: | 45      | 8        | 4         | 3            |
| ● FAST:  | 35      | 5        | 2         | 2            |
| ● S - D: | 16      | -        | -         | -            |
- Allowable bending radius: Fiber R25  
Sleeve R10

### PD-M6T142S-2

#### Dimensions (mm)



- Shape of fiber head: M6(sharp bending)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi$  0.02 gold wire
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 190     | 23       | 14        | 11           |
| ● S T D: | 90      | 11       | 7         | 5.5          |
| ● FAST:  | 60      | 8        | 4         | 3            |
| ● S - D: | 32      | -        | -         | -            |
- Allowable bending radius: R1

- Notes:**
- 1) The sensing range is specified for white non-glossy paper(100x100mm)as the object.
  - 2) please take care that the sensing of the free-cut type fiber may be reduced by 20% max. Depending upon how the fiber is cut.
  - 3) The minimum sensing from the rated sensing range.

# Plastic Fibers

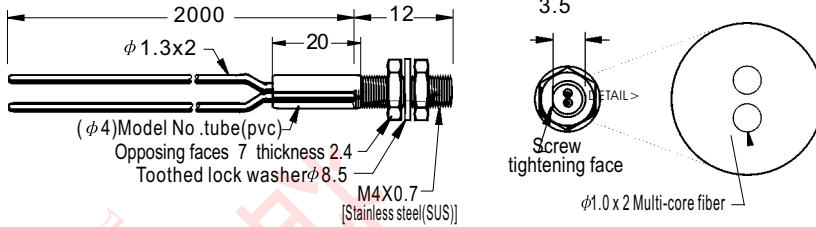
## Diffuse Mode

## Bifurcated Cables



### PD-M4T142S-2

#### Dimensions (mm)



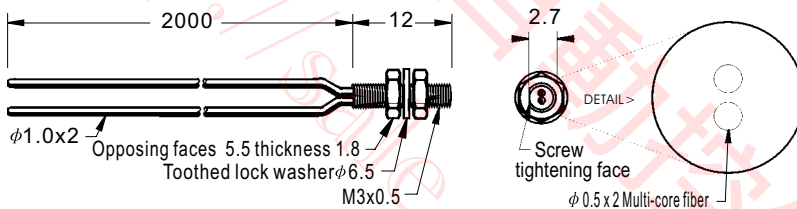
- Shape of fiber head: M4(sharp bending)
- Fiber cable length: 2000(Free-cut)
- Min.sensing object at the maximum sensitivity:  $\phi$  0.02 gold wire
- Range:

	Red LED	Blue LED	Green LED	Infrared LED
LONG:	190	23	14	11
S T D:	90	11	7	5.5
FAST:	60	8	4	3
S - D:	32	-	-	-

- Allowable bending radius: R1

### PD-M3T152S-1

#### Dimensions (mm)



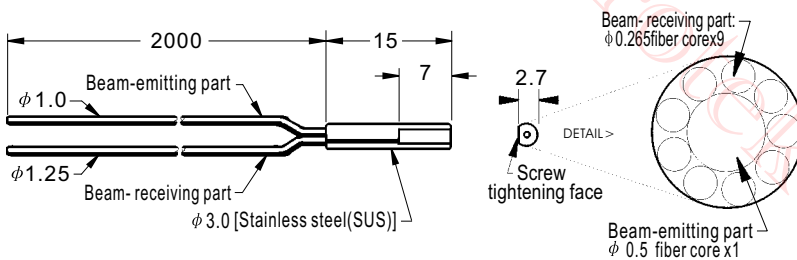
- Shape of fiber head: M3(sharp bending)
- Fiber cable length: 2000(Free-cut)
- Min.sensing object at the maximum sensitivity:  $\phi$  0.02 gold wire
- Range:

	Red LED	Blue LED	Green LED	Infrared LED
LONG:	30	5	3	2
S T D:	15	2.5	1.5	1
FAST:	12	1.5	1	-
S - D:	5	-	-	-

- Allowable bending radius: R1

### PD-D3T222S

#### Dimensions (mm)



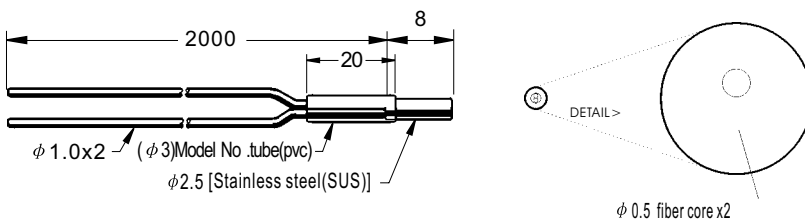
- Shape of fiber head:  $\phi$  3(sharp bending)
- Fiber cable length: 2000(Free-cut)
- Min.sensing object at the maximum sensitivity:  $\phi$  0.02 gold wire
- Range:

	Red LED	Blue LED	Green LED	Infrared LED
LONG:	65	11	6	5
S T D:	32	5	3	2.5
FAST:	25	3	2	1.5
S - D:	11	-	-	-

- Allowable bending radius: R2

### PD-D2.5F152S

#### Dimensions (mm)



- Shape of fiber head:  $\phi$  2.5(standard)
- Fiber cable length: 2000(Free-cut)
- Min.sensing object at the maximum sensitivity:  $\phi$  0.02 gold wire
- Range:

	Red LED	Blue LED	Green LED	Infrared LED
LONG:	90	16	8	6
S T D:	45	8	4	3
FAST:	35	5	2	2
S - D:	16	-	-	-

- Allowable bending radius: Fiber R25  
Sleeve R10

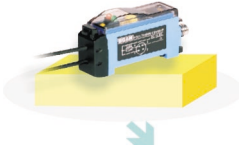
**Notes:** 1) The sensing range is specified for white non-glossy paper(100x100mm)as the object.

2) please take care that the sensing of the free-cut type fiber may be reduced by 20% max. Depending upon how the fiber is cut.

3) The minimum sensing from the rated sensing range.

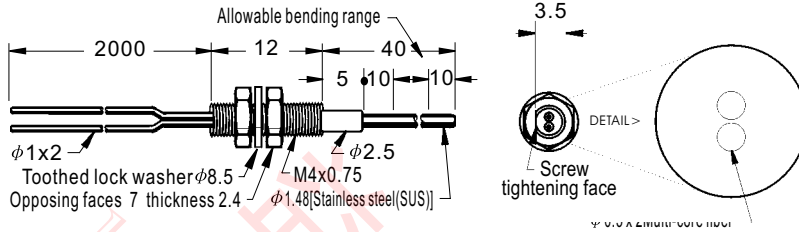
# Plastic Fibers

## Diffuse Mode Bifurcated Cables



### PD-M4P152S-40

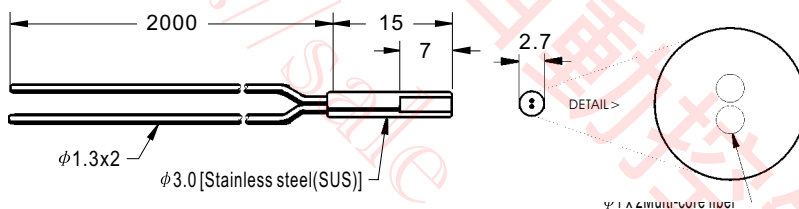
#### Dimensions (mm)



- Shape of fiber head: M4 (sharp bending)
  - Fiber cable length: 2000 (Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi 0.02$  gold wire
  - Range:
- |        | Red LED | Blue LED | Green LED | Infrared LED |
|--------|---------|----------|-----------|--------------|
| LONG:  | 30      | 5        | 3         | 2            |
| S T D: | 15      | 2.5      | 1.5       | 1            |
| FAST:  | 12      | 1.5      | 1         | -            |
| S - D: | 5       | -        | -         | -            |
- Allowable bending radius: Fiber R25  
Sleeve R10

### PD-D3F142S

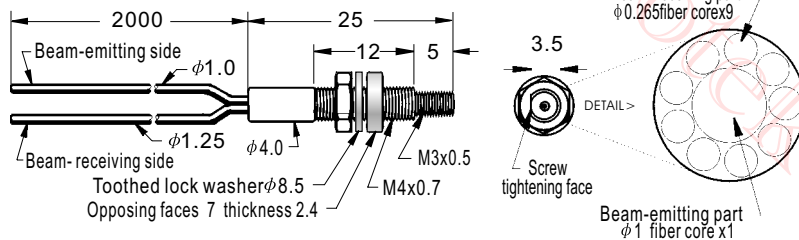
#### Dimensions (mm)



- Shape of fiber head:  $\phi 3$  (sharp bending)
  - Fiber cable length: 2000 (Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi 0.02$  gold wire
  - Range:
- |        | Red LED | Blue LED | Green LED | Infrared LED |
|--------|---------|----------|-----------|--------------|
| LONG:  | 190     | 23       | 14        | 11           |
| S T D: | 90      | 11       | 7         | 5.5          |
| FAST:  | 60      | 8        | 4         | 3            |
| S - D: | 32      | -        | -         | -            |
- Allowable bending radius: R1

### PD-M4P232S-H

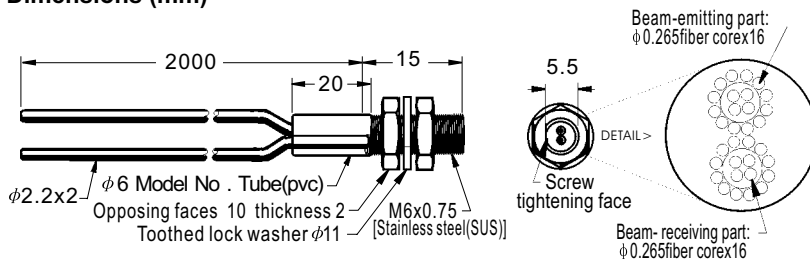
#### Dimensions (mm)



- Shape of fiber head: M4 (sharp bending)
  - Fiber cable length: 2000 (Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi 0.02$  gold wire
  - Range:
- |        | Red LED | Blue LED | Green LED | Infrared LED |
|--------|---------|----------|-----------|--------------|
| LONG:  | 65      | 11       | 6         | 5            |
| S T D: | 32      | 5        | 3         | 2.5          |
| FAST:  | 25      | 3        | 2         | 1.5          |
| S - D: | 11      | -        | -         | -            |
- Allowable bending radius: R2

### PD-M6T242S

#### Dimensions (mm)



- Shape of fiber head: M6 (sharp bending)
  - Fiber cable length: 2000 (Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi 0.02$  gold wire
  - Range:
- |        | Red LED | Blue LED | Green LED | Infrared LED |
|--------|---------|----------|-----------|--------------|
| LONG:  | 220     | 40       | 20        | 18           |
| S T D: | 100     | 20       | 10        | 9            |
| FAST:  | 70      | 13       | 7         | 6            |
| S - D: | 35      | -        | -         | -            |
- Allowable bending radius: R4

**Notes:** 1) The sensing range is specified for white non-glossy paper (100x100mm) as the object.

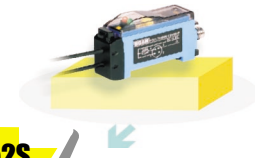
2) please take care that the sensing of the free-cut type fiber may be reduced by 20% max. Depending upon how the fiber is cut.

3) The minimum sensing from the rated sensing range.

# Plastic Fibers

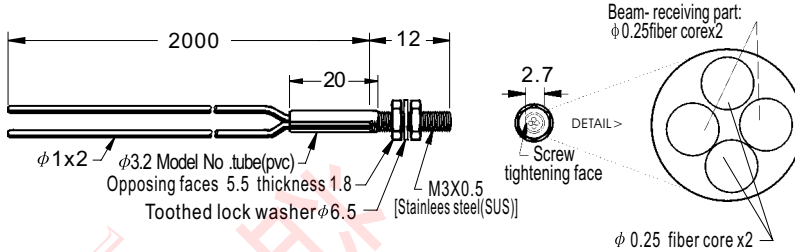
## Diffuse Mode

## Bifurcated Cables



### PD-M3T252S

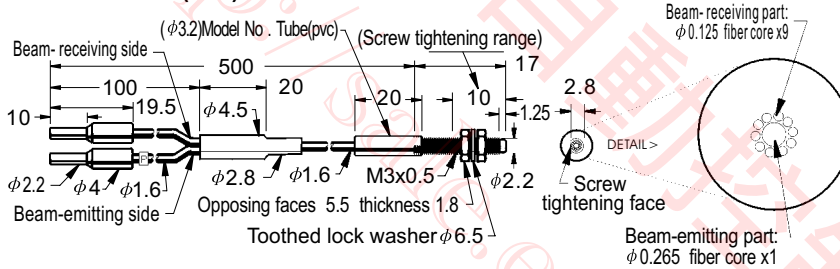
#### Dimensions (mm)



- Shape of fiber head: M3 (Flexible)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi$  0.02 gold wire
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 36      | 5        | 3         | 2            |
| ● S T D: | 18      | 2.5      | 1.5       | 1            |
| ● FAST:  | 14      | 1.5      | 1         | -            |
| ● S - D: | 6       | -        | -         | -            |
- Allowable bending radius: R4

### PD-M3P 270.5S-125

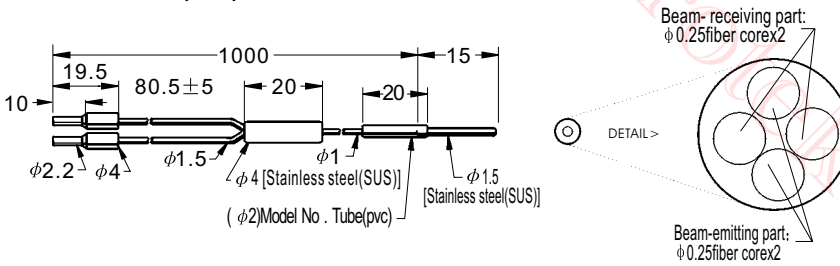
#### Dimensions (mm)



- Shape of fiber head: M3 (special use)
  - Fiber cable length: 500(Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi$  0.02 gold wire
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 38      | 6        | 3         | 10           |
| ● S T D: | 18      | 3        | 1.5       | 5            |
| ● FAST:  | 14      | 2        | 1         | 3            |
| ● S - D: | 6       | -        | -         | -            |
- Allowable bending radius: R25

### PD-D2.3P251S-15

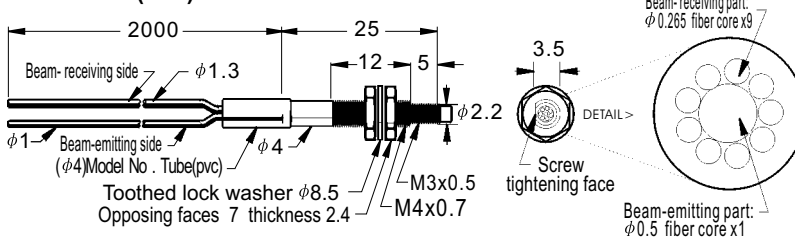
#### Dimensions (mm)



- Shape of fiber head:  $\phi$  1.5 (Flexible)
  - Fiber cable length: 1000
  - Min.sensing object at the maximum sensitivity:  $\phi$  0.02 gold wire
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 50      | 8        | 4         | 7            |
| ● S T D: | 25      | 4        | 2         | 3.5          |
| ● FAST:  | 19      | 2.5      | 1.5       | 2            |
| ● S - D: | 9       | -        | -         | -            |
- Allowable bending radius: R4

### PD-M4P282S-2.2

#### Dimensions (mm)



- Shape of fiber head: M4(Special use)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi$  0.02 gold wire
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 110     | 22       | 12        | 7            |
| ● S T D: | 55      | 11       | 6         | 3.5          |
| ● FAST:  | 42      | 8        | 4         | 2            |
| ● S - D: | 19      | -        | -         | -            |
- Allowable bending radius: R25

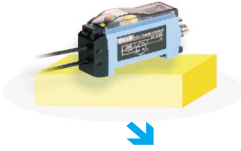
**Notes:** 1) The sensing range is specified for white non-glossy paper(100x100mm)as the object.

2) please take care that the sensing of the free-cut type fiber may be reduced by 20% max. Depending upon how the fiber is cut.

3) The minimum sensing from the rated sensing range.

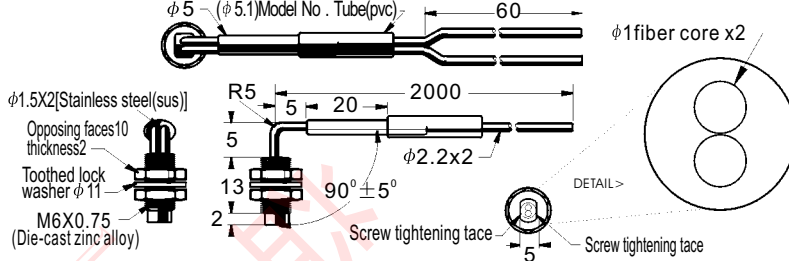
# Plastic Fibers

## Diffuse Mode Bifurcated Cables



### PD-M6A142S-2

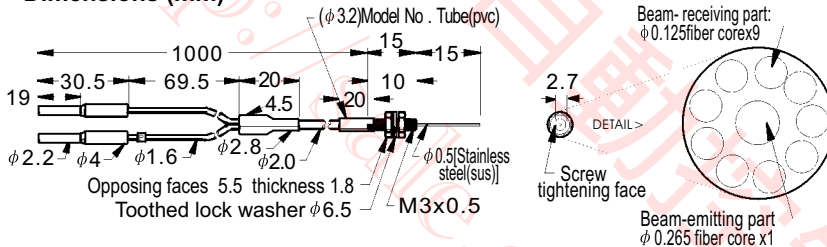
#### Dimensions (mm)



- Shape of fiber head: M6 (standard)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi 0.02$  gold wire
  - Range:
- |        | Red LED | Blue LED | Green LED | Infrared LED |
|--------|---------|----------|-----------|--------------|
| LONG:  | 185     | 32       | 16        | 10           |
| S T D: | 85      | 16       | 8         | 5            |
| FAST:  | 60      | 10       | 5         | 3            |
| S - D: | 30      | -        | -         | -            |
- Allowable bending radius: R25

### PD-M3P271S-15

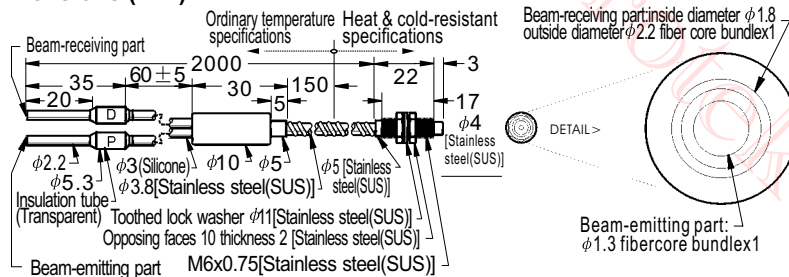
#### Dimensions (mm)



- Shape of fiber head: M3 (Special use)
  - Fiber cable length: 1000
  - Min.sensing object at the maximum sensitivity:  $\phi 0.02$  gold wire
  - Range:
- |        | Red LED | Blue LED | Green LED | Infrared LED |
|--------|---------|----------|-----------|--------------|
| LONG:  | 38      | 6        | 3         | 4            |
| S T D: | 18      | 3        | 1.5       | 2            |
| FAST:  | 14      | 2        | 1         | 1.5          |
| S - D: | 6       | -        | -         | -            |
- Allowable bending radius: R25

### PD-M6P312S-3

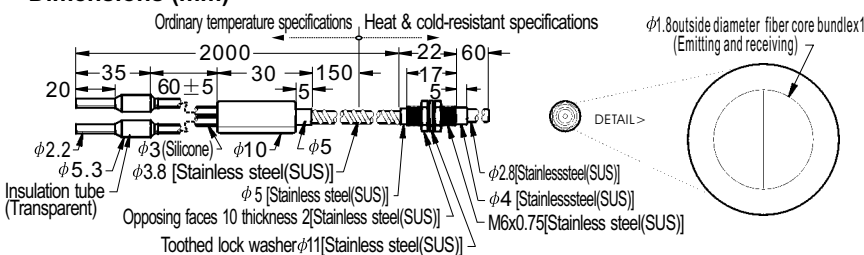
#### Dimensions (mm)



- Shape of fiber head: M6 (Environment resistant)
  - Fiber cable length: 2000
  - Min.sensing object at the maximum sensitivity:  $\phi 0.02$  gold wire
  - Range:
- |        | Red LED | Blue LED | Green LED | Infrared LED |
|--------|---------|----------|-----------|--------------|
| LONG:  | 270     | 36       | 20        | 140          |
| S T D: | 140     | 18       | 10        | 70           |
| FAST:  | 100     | 12       | 7         | 45           |
| S - D: | 47      | -        | -         | -            |
- Allowable bending radius: R25

### PD-M6P182S-60

#### Dimensions (mm)



- Shape of fiber head: M6(Environment resistant)
  - Fiber cable length: 2000
  - Min.sensing object at the maximum sensitivity:  $\phi 0.02$  gold wire
  - Range:
- |        | Red LED | Blue LED | Green LED | Infrared LED |
|--------|---------|----------|-----------|--------------|
| LONG:  | 270     | 36       | 20        | 140          |
| S T D: | 140     | 18       | 10        | 70           |
| FAST:  | 100     | 12       | 7         | 45           |
| S - D: | 47      | -        | -         | -            |
- Allowable bending radius: Fiber R25  
Sleeve R10

- Notes:**
- 1) The sensing range is specified for white non-glossy paper(100x100mm)as the object.
  - 2) please take care that the sensing of the free-cut type fiber may be reduced by 20% max. Depending upon how the fiber is cut.
  - 3) The minimum sensing from the rated sensing range.



# Diffuse Mode

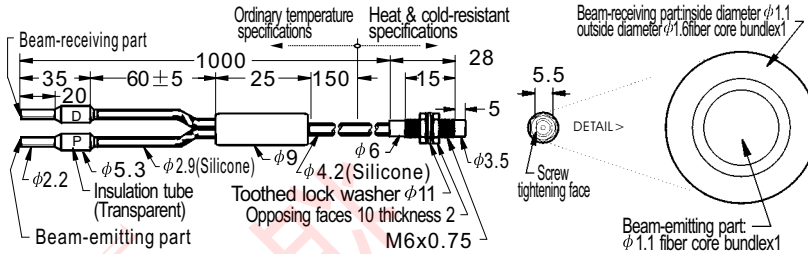
# Plastic Fibers

## Bifurcated Cables



### PD-M6P301S-5

#### Dimensions (mm)



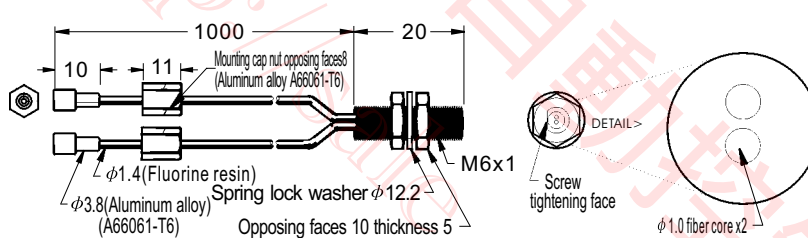
- Shape of fiber head: M6(Environment resistant)
- Fiber cable length: 1000
- Min.sensing object at the maximum sensitivity: φ0.02 gold wire
- Range:

	Red LED	Blue LED	Green LED	Infrared LED
● LONG:	270	36	20	140
● S T D:	140	18	10	70
● FAST:	100	12	7	45
● S - D:	47	-	-	-

Allowable bending radius: R25

### PD-M6T141S

#### Dimensions (mm)



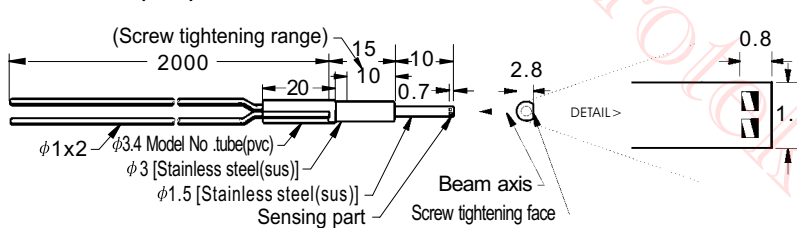
- Shape of fiber head: M6(Environment resistant)
- Fiber cable length: 1000
- Min.sensing object at the maximum sensitivity: φ0.02 gold wire
- Range:

	Red LED	Blue LED	Green LED	Infrared LED
● LONG:	165	26	14	21
● S T D:	75	13	7	10
● FAST:	52	9	4	6
● S - D:	26	-	-	-

Allowable bending radius: R200

### PD-D3V132S-10

#### Dimensions (mm)



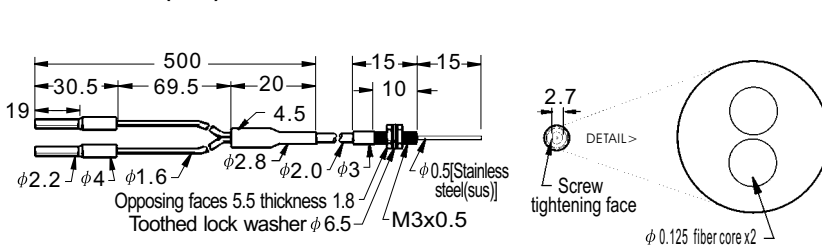
- Shape of fiber head: φ1.5 (standard)
- Fiber cable length: 2000(Free-cut)
- Min.sensing object at the maximum sensitivity: φ0.02 gold wire
- Range:

	Red LED	Blue LED	Green LED	Infrared LED
● LONG:	55	6	3	-
● S T D:	25	3	-	-
● FAST:	17	-	-	-
● S - D:	9	-	-	-

Allowable bending radius: R25

### PD-M3P160.5S-15

#### Dimensions (mm)



- Shape of fiber head: M3 (special use)
- Fiber cable length: 500
- Min.sensing object at the maximum sensitivity: φ0.02 gold wire
- Range:

	Red LED	Blue LED	Green LED	Infrared LED
● LONG:	5	-	-	-
● S T D:	3	-	-	-
● FAST:	2	-	-	-

Allowable bending radius: R25

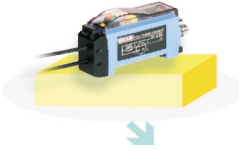
**Notes:** 1) The sensing range is specified for white non-glossy paper(100x100mm)as the object.

2) please take care that the sensing of the free-cut type fiber may be reduced by 20% max. Depending upon how the fiber is cut.

3) The minimum sensing from the rated sensing range.

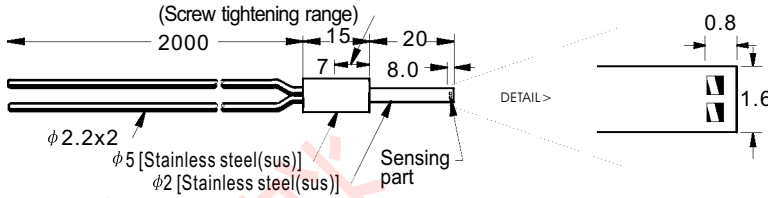
# Plastic Fibers

## Diffuse Mode Bifurcated Cables



### PD-D5V132S-20

#### Dimensions (mm)

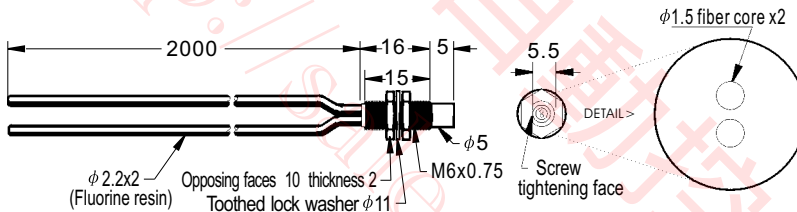


- Shape of fiber head:  $\phi 2$  (standard)
- Fiber cable length: 2000(Free-cut)
- Min.sensing object at the maximum sensitivity:  $\phi 0.02$  gold wire
- Range:
 

	Red LED	Blue LED	Green LED	Infrared LED
LONG:	100	14	7	4
S T D:	45	7	3.5	-
FAST:	32	4	-	-
S - D:	16	-	-	-
- Allowable bending radius: R25

### PD-M6P172S-5

#### Dimensions (mm)

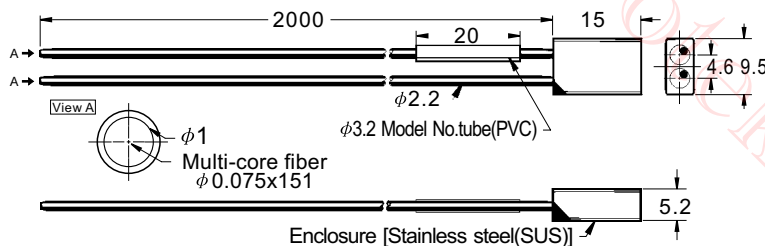


- Shape of fiber head: M6 (standard)
- Fiber cable length: 2000(Free-cut)
- Min.sensing object at the maximum sensitivity:  $\phi 0.06$  gold wire
- Range:
 

	Red LED	Blue LED	Green LED	Infrared LED
LONG:	880	72	32	70
S T D:	440	36	16	35
FAST:	300	26	10	25
S - D:	155	-	-	-
- Allowable bending radius: R25

### PD-DR682S

#### Dimensions (mm)

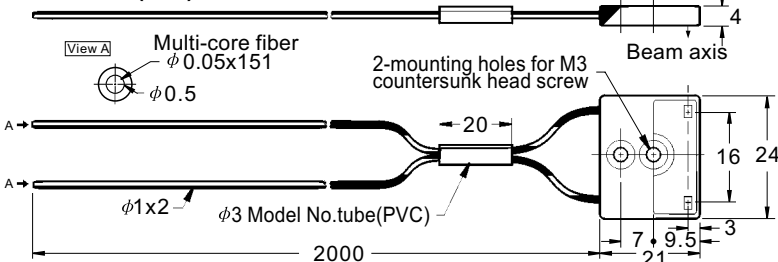


- Shape of fiber head: W5.2xH9.5xD15 (Sharp bending)
- Fiber cable length: 2000(Free-cut)
- Min.sensing object at the maximum sensitivity:  $\phi 0.03$  copper wire
- Range:
 

	Red LED
LONG:	20 to 180
S T D:	20 to 230
FAST:	20 to 170
S - D:	25 to 100
- Allowable bending radius: R1

### PD-DI692S-1

#### Dimensions (mm)



- Shape of fiber head: W24xH21xD4 (Special use)
- Fiber cable length: 2000(Free-cut)
- Min.sensing object at the maximum sensitivity:  $\phi 1.9$  metal pipe(gray)
- Range:
 

	Red LED
LONG:	6.5 to 14 (Convergent point 8)
S T D:	7 to 12 (Convergent point 8)
FAST:	7.5 to 12 (Convergent point 8)
- Allowable bending radius: R1

- Notes:** 1) The sensing range is specified for white non-glossy paper(100x100mm)as the object.  
 2) please take care that the sensing of the free-cut type fiber may be reduced by 20% max. Depending upon how the fiber is cut.  
 3) The minimum sensing from the rated sensing range.

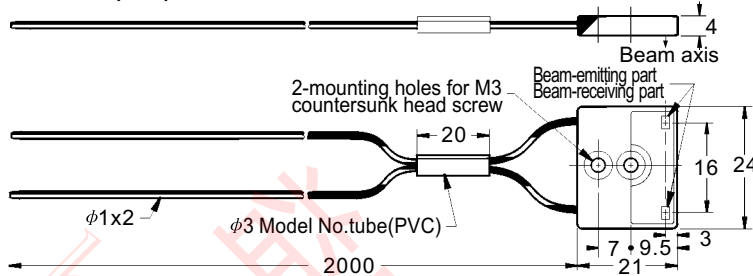
# Diffuse Mode Bifurcated Cables

# Plastic Fibers



## PD-DI692S

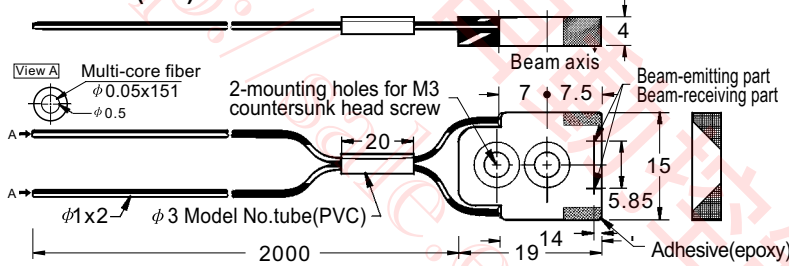
### Dimensions (mm)



- Shape of fiber head: W24xH21xD4 (Special use)
- Fiber cable length: 2000(Free-cut)
- Min.sensing object at the maximum sensitivity:  $\phi 0.06$  gold wire
- Range:
  - Red LED
  - LONG: 2.5 to 18 (Convergent point 8)
  - S T D: 3 to 16 (Convergent point 8)
  - FAST: 3.5 to 15 (Convergent point 8)
- Allowable bending radius: R10

## PD-DG702S

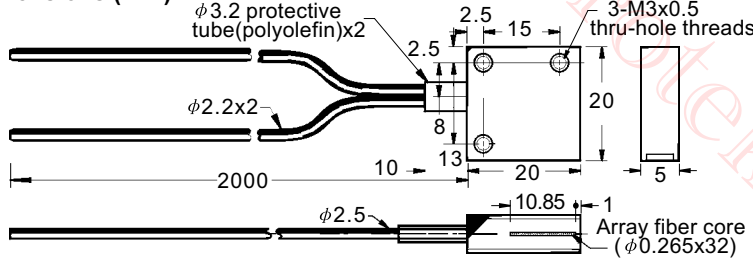
### Dimensions (mm)



- Shape of fiber head: W15xH19xD3 (Special use)
- Fiber cable length: 2000(Free-cut)
- Min.sensing object at the maximum sensitivity:  $\phi 0.08$  gold wire
- Range:
  - Red LED
  - LONG: 0.2 to 3.5 (Convergent point 8)
  - S T D: 0.9 to 2.7 (Convergent point 8)
  - FAST: 1 to 2.5 (Convergent point 8)
- Allowable bending radius: R1

## PD-DB722S

### Dimensions (mm)

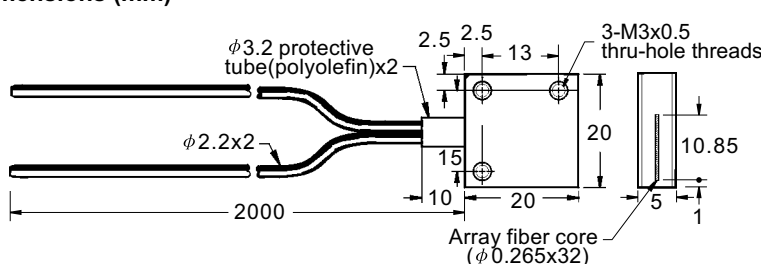


- Shape of fiber head: W5xH20xD20 (Special use)
- Fiber cable length: 2000(Free-cut)
- Min.sensing object at the maximum sensitivity:  $\phi 0.02$  gold wire
- Range:
 

	Red LED	Blue LED	Green LED	Infrared LED
LONG:	220	40	18	12
S T D:	110	20	9	6
FAST:	78	13	5	4
S - D:	39	-	-	-
- Allowable bending radius: R25

## PD-DC722S

### Dimensions (mm)



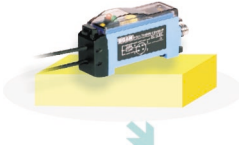
- Shape of fiber head: W5xH20xD20 (Special use)
- Fiber cable length: 2000(Free-cut)
- Min.sensing object at the maximum sensitivity:  $\phi 0.02$  gold wire
- Range:
 

	Red LED	Blue LED	Green LED	Infrared LED
LONG:	220	40	18	12
S T D:	110	20	9	6
FAST:	78	13	5	4
S - D:	39	-	-	-
- Allowable bending radius: R25

- Notes:** 1) The sensing range is specified for white non-glossy paper(100x100mm)as the object.  
 2) please take care that the sensing of the free-cut type fiber may be reduced by 20% max. Depending upon how the fiber is cut.  
 3) The minimum sensing from the rated sensing range.

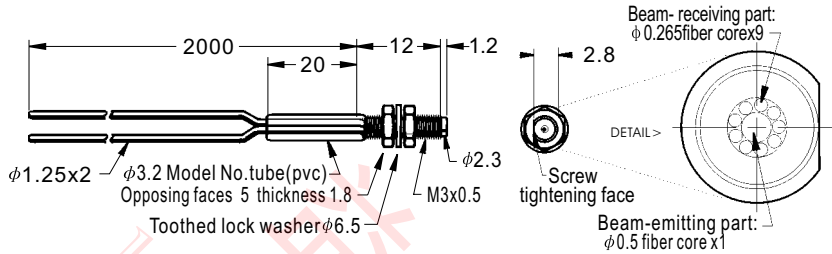
# Plastic Fibers

## Diffuse Mode Bifurcated Cables



### FD-M2.3P282S

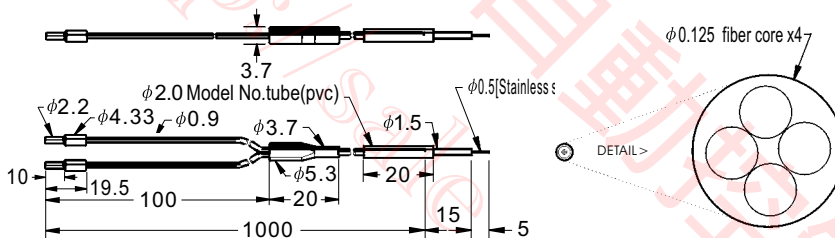
#### Dimensions (mm)



- Shape of fiber head: M3(special)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi$  0.02 gold wire
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 110     | 22       | 12        | 7            |
| ● S T D: | 55      | 11       | 6         | 3.5          |
| ● FAST:  | 42      | 8        | 4         | 2            |
| ● S - D: | 19      | -        | -         | -            |
- Allowable bending radius: R25

### PD-D1.5F521S-J

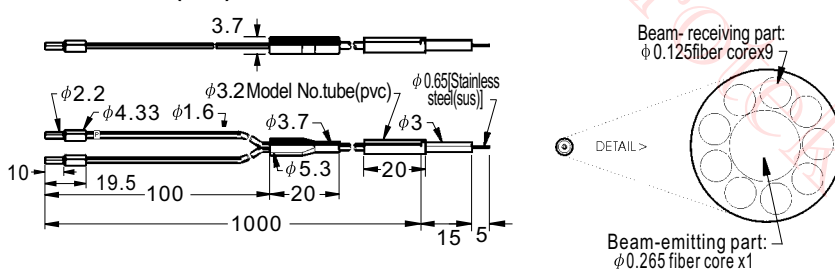
#### Dimensions (mm)



- Shape of fiber head:  $\phi$  0.5 (Special use)
  - Fiber cable length: 1000
  - Min.sensing object at the maximum sensitivity:  $\phi$  0.02 gold wire
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 11      | 2        | 1         | 1            |
| ● S T D: | 6       | -        | -         | -            |
| ● FAST:  | 4       | 1        | -         | -            |
| ● S - D: | 1       | -        | -         | -            |
- Allowable bending radius: R10

### PD-D3F71S-J

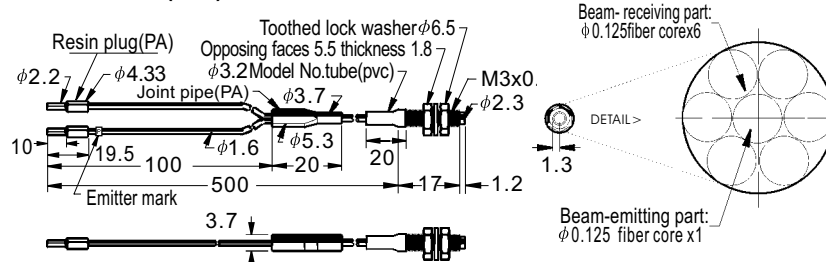
#### Dimensions (mm)



- Shape of fiber head:  $\phi$  3 (Special use)
  - Fiber cable length: 1000
  - Min.sensing object at the maximum sensitivity:  $\phi$  0.02 gold wire
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 45      | 6        | 3         | 6            |
| ● S T D: | 23      | 3        | 1.5       | 3            |
| ● FAST:  | 17      | 2        | 1         | 2            |
| ● S - D: | 6       | -        | -         | -            |
- Allowable bending radius: R25

### PD-M3P360.5S-1.2

#### Dimensions (mm)



- Shape of fiber head: M3(Special use)
  - Fiber cable length: 500
  - Min.sensing object at the maximum sensitivity:  $\phi$  0.04 gold wire
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 15      | 2        | 1         | 3            |
| ● S T D: | 8       | 1        | -         | 1.5          |
| ● FAST:  | 5       | -        | -         | 1            |
| ● S - D: | 3       | -        | -         | -            |
- Allowable bending radius: R10

- Notes:**
- 1) The sensing range is specified for white non-glossy paper(100x100mm)as the object.
  - 2) please take care that the sensing of the free-cut type fiber may be reduced by 20% max. Depending upon how the fiber is cut.
  - 3) The minimum sensing from the rated sensing range.

# Diffuse Mode

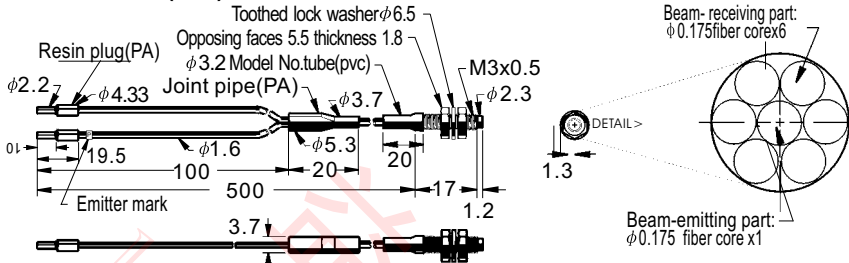
## Bifurcated Cables

# Plastic Fibers



### PD-M3P350.5S-12

#### Dimensions (mm)



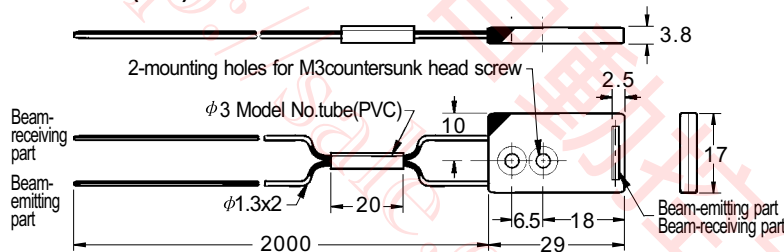
- Shape of fiber head: M3 (Special use)
- Fiber cable length: 500
- Min.sensing object at the maximum sensitivity:  $\phi$  0.04 gold wire
- Range:

	Red LED	Blue LED	Green LED	Infrared LED
LONG:	25	5	2	6
S T D:	12	2	1	3
FAST:	9	1	-	2
S - D:	5	-	-	-

- Allowable bending radius: R25

### PD-DD732S

#### Dimensions (mm)



Shape of fiber head: W17xH29xD3.8 (Special use)

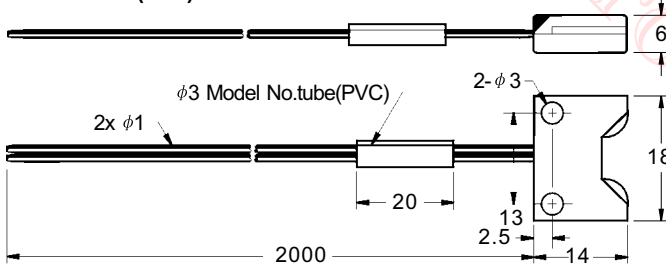
- Fiber cable length: 2000(Free-cut)
- Min.sensing object at the maximum sensitivity: LCD glass
- Range:

	Red LED
S T D:	0 to 20

- Allowable bending radius: R4

### PD-DK572S

#### Dimensions (mm)



Shape of fiber head: W6xH18xD14 (Special use)

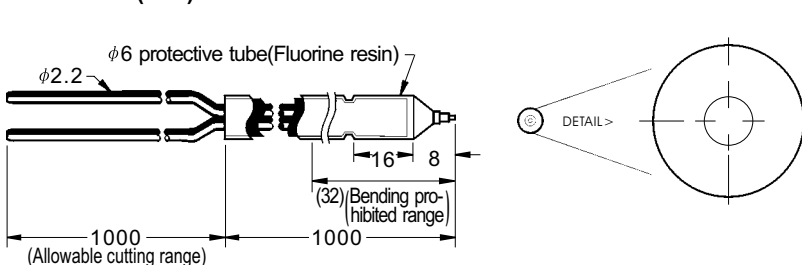
- Fiber cable length: 2000(Free-cut)
- Min.sensing object at the maximum sensitivity:  $\phi$  0.02 gold wire
- Range:

	Red LED	Blue LED	Green LED	Infrared LED
LONG:	2.5 to 18 (Contact point)	4.5 to 9.5	5to9	4.5to9.5
S T D:	4 to 12 (Contact point)	5 to 9	5.5to8	-
FAST:	4.5 to 11 (Contact point)	5.5 to 8	-	-
S - D:	4.8 to 9.5 (Contact point)	-	-	-

- Allowable bending radius: R10

### PD-D6Z451S

#### Dimensions (mm)



- Shape of fiber head:  $\phi$  6(Contact type)
- Fiber cable length: 2000(Free-cut) Note4
- Min.sensing object at the maximum sensitivity: (Liquid)
- Allowable bending radius: Protective Tube R40 Fiber R15)

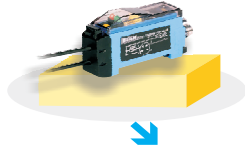
**Notes:** 1) The sensing range is specified for white non-glossy paper(100x100mm)as the object.

2) please take care that the sensing of the free-cut type fiber may be reduced by 20% max. Depending upon how the fiber is cut.

3) The minimum sensing from the rated sensing range.

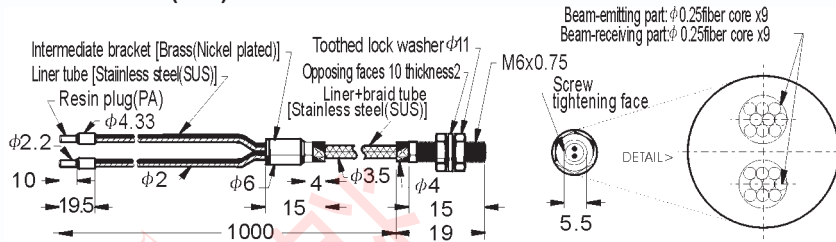
# Plastic Fibers

## Diffuse Mode Bifurcated Cables



### PD-M6T371S

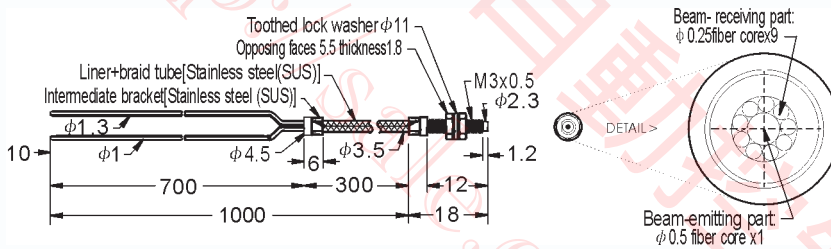
#### Dimensions (mm)



- Shape of fiber head: M6 (special use)
  - Fiber cable length: 1000
  - Min.sensing object at the maximum sensitivity: 0.02 gold wire
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 185     | 32       | 16        | 20           |
| ● S T D: | 80      | 16       | 8         | 15           |
| ● FAST:  | 60      | 10       | 5         | 10           |
| ● S - D: | 35      | -        | -         | -            |
- Allowable bending radius: R10

### PD-M3P381S-1.2

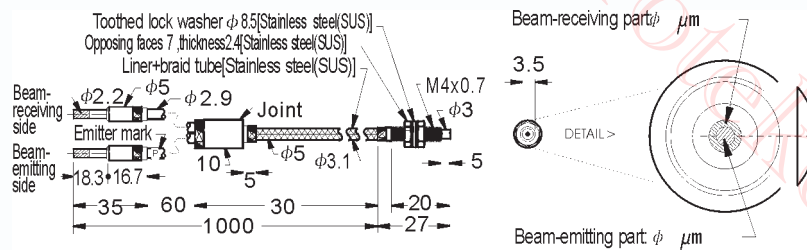
#### Dimensions (mm)



- Shape of fiber head: M3(special use)
  - Fiber cable length: 1000(Free-cut)Note4
  - Min.sensing object at the maximum sensitivity: 0.02 gold wire
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 310     | 46       | 24        | 20           |
| ● S T D: | 140     | 23       | 12        | 10           |
| ● FAST:  | 100     | 15       | 8         | 7            |
| ● S - D: | 47      | -        | -         | -            |
- Allowable bending radius: R10

### PD-M4P411S-5

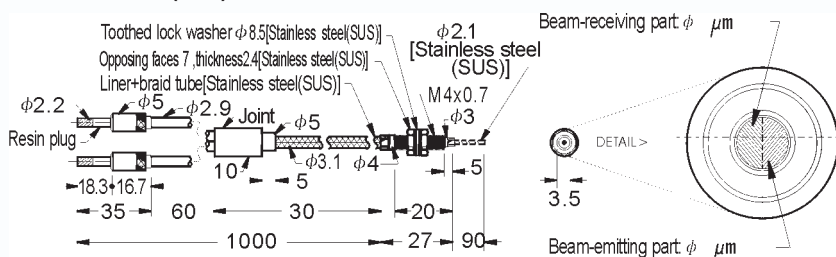
#### Dimensions (mm)



- Shape of fiber head: M4(Environment Resistant)
  - Fiber cable length: 1000
  - Min.sensing object at the maximum sensitivity: 0.02 gold wire
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 270     | 36       | 20        | 140          |
| ● S T D: | 140     | 18       | 10        | 70           |
| ● FAST:  | 100     | 12       | 7         | 45           |
| ● S - D: | 47      | -        | -         | -            |
- Allowable bending radius: R25

### PD-M4P401S-90

#### Dimensions (mm)



- Shape of fiber head: φ2.1(Environment Resistant)
  - Fiber cable length: 1000
  - Min.sensing object at the maximum sensitivity: 0.02 gold wire
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 160     | 22       | 12        | 80           |
| ● S T D: | 80      | 11       | 6         | 40           |
| ● FAST:  | 57      | 7        | 4         | 28           |
| ● S - D: | 26      | -        | -         | -            |
- Allowable bending radius: Fiber R25 sleeve R10)

- Notes:** 1) The sensing range is specified for white non-glossy paper(100x100mm)as the object.  
 2) please take care that the sensing of the free-cut type fiber may be reduced by 20% max. Depending upon how the fiber is cut.  
 3) The minimum sensing from the rated sensing range.  
 4) Following is the allowable cutting range from the amplifier is inserted FD-G6X:700mm

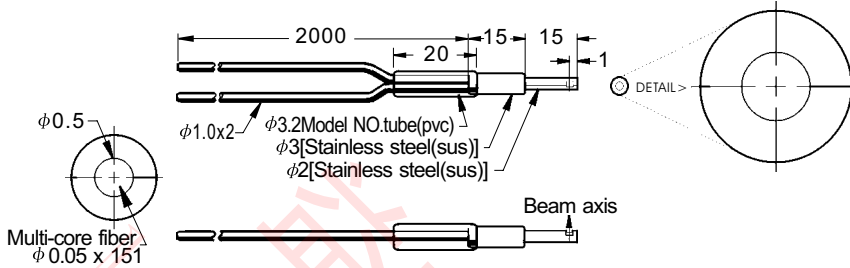
# Diffuse Mode Bifurcated Cables

# Plastic Fibers



## PD-D2V022S

### Dimensions (mm)



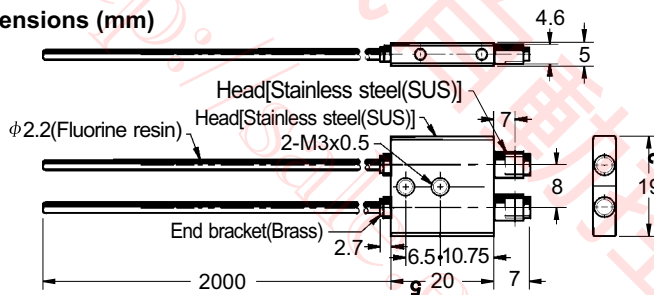
- Shape of fiber head:  $\phi 3$  (Sharp bending)
- Fiber cable length: 2000(Free-cut)
- Min.sensing object at the maximum sensitivity:  $\phi 0.02$  opaque object
- Range:

LONG:	90	46	24	20
S T D:	110	23	12	10
FAST:	85	15	8	7
S - D:	39	-	-	-

- Allowable bending radius: R4

## PD-DY652S

### Dimensions (mm)



Shape of fiber head: W19xH27xD5 (Environment resistant)

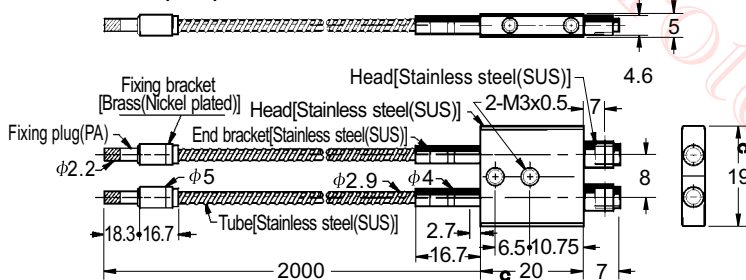
- Fiber cable length: 2000(Free-cut)
- Min.sensing object at the maximum sensitivity:  $\phi 0.02$  gold wire
- Range:

	<b>Red LED</b>
LONG:	0 to 15
S T D:	0 to 10
FAST:	1 to 8
S - D:	2 to 6

- Allowable bending radius: R25

## PD-DY652S-1

### Dimensions (mm)



Shape of fiber head: W19xH27xD5 (Environment resistant)

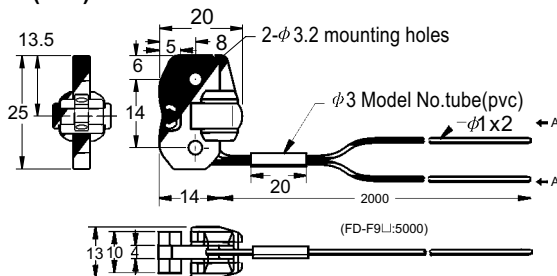
- Fiber cable length: 2000
- Min.sensing object at the maximum sensitivity:  $\phi 0.02$  gold wire
- Range:

	<b>Red LED</b>
LONG:	0 to 15
S T D:	0 to 10
FAST:	1 to 8
S - D:	2 to 6

- Allowable bending radius: R25

## PD-DM052S

### Dimensions (mm)



- Shape of fiber head:  $\phi 3$  (small fiber head)
- Fiber cable length: 2000(Free-cut)
- Min.sensing object at the maximum sensitivity:  $\phi 0.02$  gold wire
- Range:

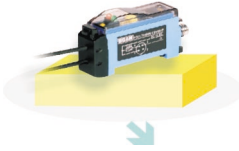
	<b>Red LED</b>	<b>Blue LED</b>	<b>Green LED</b>	<b>Infrared LED</b>
LONG:	270	46	42	26
S T D:	110	23	12	10
FAST:	85	15	8	7
S - D:	39	-	-	-

- Allowable bending radius: R25

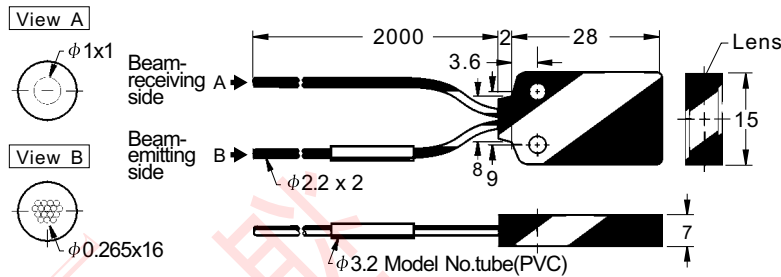
- Notes:** 1) The sensing range is specified for white non-glossy paper(100x100mm)as the object.  
2) please take care that the sensing of the free-cut type fiber may be reduced by 20% max. Depending upon how the fiber is cut.  
3) The minimum sensing from the rated sensing range.

# Plastic Fibers

## Diffuse Mode Bifurcated Cables



### PD-DWB712S



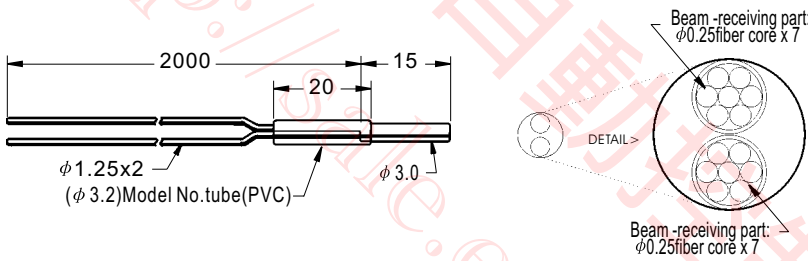
Shape of fiber head:  $\phi 3$ (standard)  
 Fiber cable length: 2000(Free-cut)  
 Min.sensing object at the maximum sensitivity:  $\phi 0.02$  gold wire

Range:

	Red LED	Blue LED	Green LED	Infrared LED
● LONG:	200	25	-	-
● S T D:	150	15	-	-
● FAST:	100	-	-	-
● S - D:	50	-	-	-

Allowable bending radius: R25

### PD-D3F342S



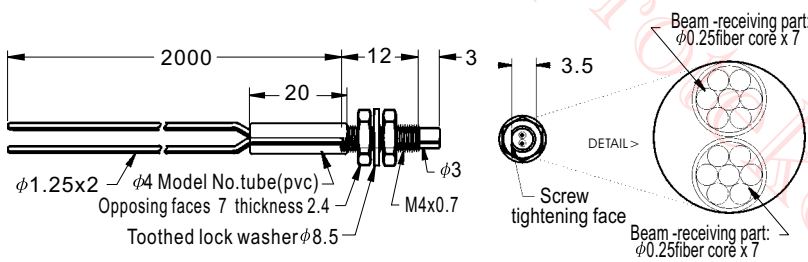
Shape of fiber head:  $\phi 3$ (Flexible)  
 Fiber cable length: 2000(Free-cut)  
 Min.sensing object at the maximum sensitivity:  $\phi 0.02$  gold wire

Range:

	Red LED	Blue LED	Green LED	Infrared LED
● LONG:	90	20	10	8
● S T D:	45	10	5	4
● FAST:	30	6	3	2.5
● S - D:	16	-	-	-

Allowable bending radius: R4

### PD-M4P342S-A



Shape of fiber head: M4(Flexible)  
 Fiber cable length: 2000(Free-cut)  
 Min.sensing object at the maximum sensitivity:  $\phi 0.02$  gold wire

Range:

	Red LED	Blue LED	Green LED	Infrared LED
● LONG:	90	46	24	20
● S T D:	110	23	12	10
● FAST:	85	15	8	7
● S - D:	39	-	-	-

Allowable bending radius: R4

- Notes:** 1) The sensing range is specified for white non-glossy paper(100x100mm)as the object.  
 2) please take care that the sensing of the free-cut type fiber may be reduced by 20% max. Depending upon how the fiber is cut.  
 3) The minimum sensing from the rated sensing range.



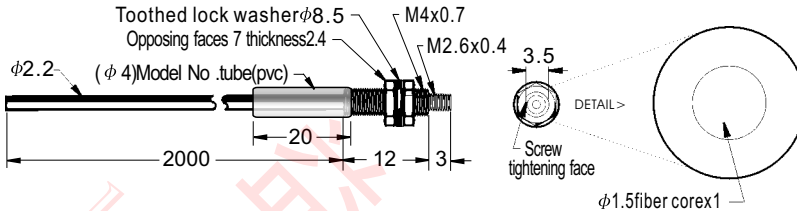
# Opposed Mode Individual Cables

# Plastic Fibers



## PT-M4P052S-A

### Dimensions (mm)

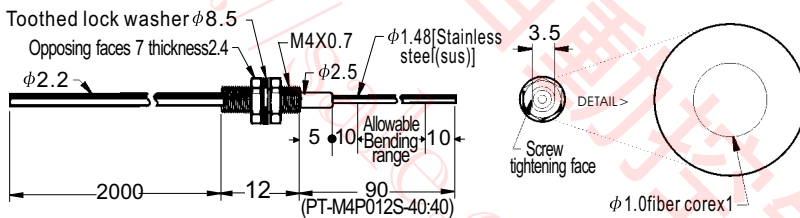


- Shape of fiber head: M4
- Fiber cable length: 2000(Free-cut)
- Min.sensing object at the maximum sensitivity:  $\phi 0.04$  opaque object
- Range:
 

	Red LED	Blue LED	Green LED	Infrared LED
LONG:	1100	220	110	100
S T D:	530	110	55	50
FAST:	400	75	40	30
S - D:	180	-	-	-
- Allowable bending radius: R25

## PT-M4P012S-90

### Dimensions (mm)

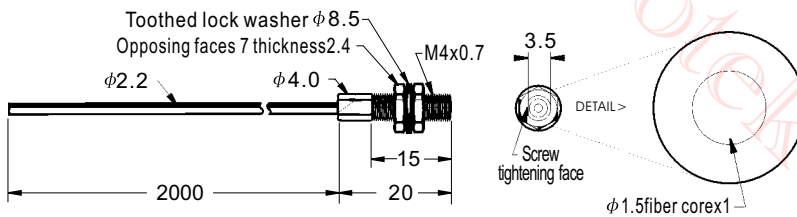


- Shape of fiber head: M4
- Fiber cable length: 2000(Free-cut)
- Min.sensing object at the maximum sensitivity:  $\phi 0.03$  opaque object
- Range:
 

	Red LED	Blue LED	Green LED	Infrared LED
LONG:	780	150	70	50
S T D:	400	75	35	25
FAST:	280	40	24	18
S - D:	130	-	-	-
- Allowable bending radius: Fiber R25  
Sleeve R10

## PT-M4T052S

### Dimensions (mm)

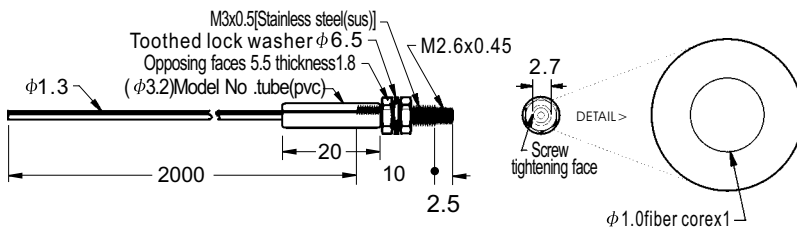


- Shape of fiber head: M4
- Fiber cable length: 2000(Free-cut)Note4
- Min.sensing object at the maximum sensitivity:  $\phi 0.03$  opaque object
- Range:
 

	Red LED	Blue LED	Green LED	Infrared LED
LONG:	1000	200	100	90
S T D:	480	100	50	45
FAST:	360	70	35	28
S - D:	168	-	-	-
- Allowable bending radius: R25

## PT-M3P012S-B

### Dimensions (mm)



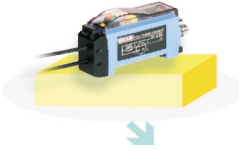
- Shape of fiber head: M4(Standard)
- Fiber cable length: 2000(Free-cut)
- Min.sensing object at the maximum sensitivity:  $\phi 0.03$  opaque object
- Range:
 

	Red LED	Blue LED	Green LED	Infrared LED
LONG:	780	150	70	50
S T D:	400	75	35	25
FAST:	280	40	24	18
S - D:	130	-	-	-
- Allowable bending radius: R25

- Notes:**
- 1) The sensing range is specified for white non-glossy paper(100x100mm)as the object.
  - 2) please take care that the sensing of the free-cut type fiber may be reduced by 20% max. Depending upon how the fiber is cut.
  - 3) The minimum sensing from the rated sensing range.
  - 4) The fiber cutter is not supplied as an accessory with withPT-M4T052S.Please order it separately.

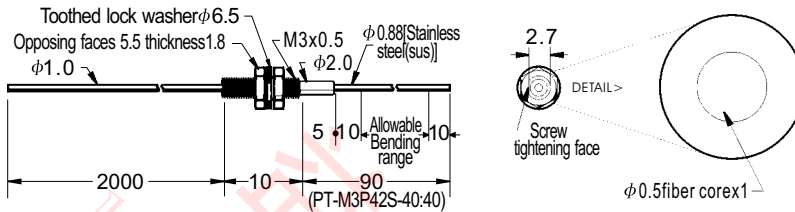
# Plastic Fibers

## Opposed Mode Individual Cables



### PT-M3P042S-90

#### Dimensions (mm)

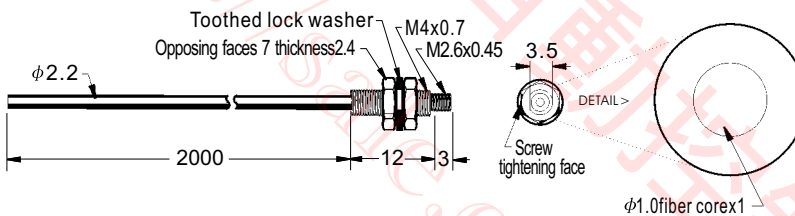


- Shape of fiber head: M3 (standard)
- Fiber cable length: 2000 (Free-cut)
- Min.sensing object at the maximum sensitivity:  $\phi 0.025$  opaque object
- Range:
 

	Red LED	Blue LED	Green LED	Infrared LED
● LONG:	270	50	24	16
● S T D:	140	25	12	8
● FAST:	100	16	8	5
● S - D:	49	-	-	-
- Allowable bending radius: Fiber R25 Sleeve R10

### PT-M4P012S-A

#### Dimensions (mm)

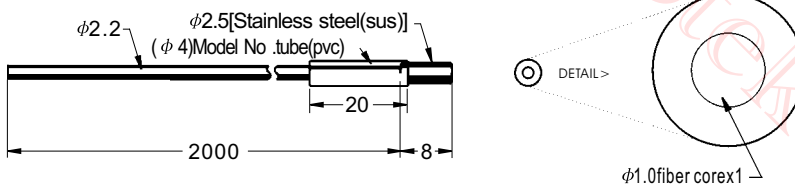


- Shape of fiber head: M6 (standard)
- Fiber cable length: 2000 (Free-cut)
- Min.sensing object at the maximum sensitivity:  $\phi 0.03$  opaque object
- Range:
 

	Red LED	Blue LED	Green LED	Infrared LED
● LONG:	780	150	70	50
● S T D:	400	75	35	25
● FAST:	280	40	24	18
● S - D:	130	-	-	-
- Allowable bending radius: R25

### PT-D2.5F012S-2

#### Dimensions (mm)

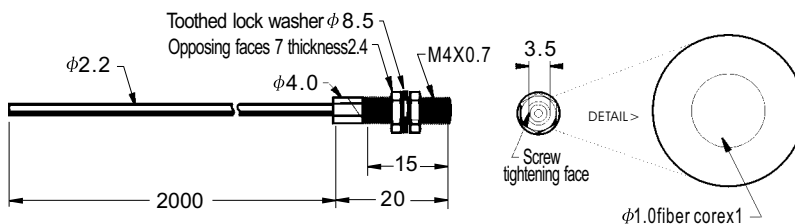


- Shape of fiber head:  $\phi 2.5$  (standard)
- Fiber cable length: 2000 (Free-cut)
- Min.sensing object at the maximum sensitivity:  $\phi 0.03$  opaque object
- Range:
 

	Red LED	Blue LED	Green LED	Infrared LED
● LONG:	780	150	70	50
● S T D:	400	75	35	25
● FAST:	280	40	24	18
● S - D:	130	-	-	-
- Allowable bending radius: R25

### PT-M4T012S

#### Dimensions (mm)



- Shape of fiber head: M4 (Standard)
- Fiber cable length: 2000 (Free-cut) Note 4
- Min.sensing object at the maximum sensitivity:  $\phi 0.03$  opaque object
- Range:
 

	Red LED	Blue LED	Green LED	Infrared LED
● LONG:	700	140	66	45
● S T D:	360	70	33	22
● FAST:	250	40	22	17
● S - D:	126	-	-	-
- Allowable bending radius: R25

- Notes:**
- 1) The sensing range is specified for white non-glossy paper (100x100mm) as the object.
  - 2) please take care that the sensing of the free-cut type fiber may be reduced by 20% max. Depending upon how the fiber is cut.
  - 3) The minimum sensing from the rated sensing range.
  - 4) The fiber cutter is not supplied as an accessory with with PT-M4T012S. Please order it separately.

# Opposed Mode

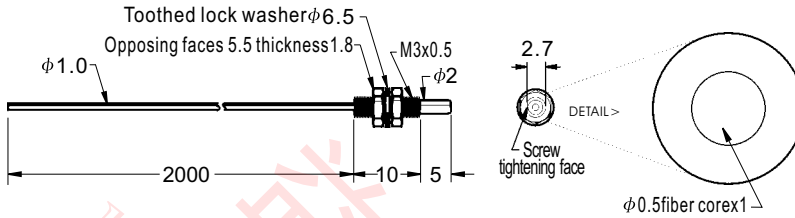
## Individual Cables

# Plastic Fibers



### PT-M3P042S-5

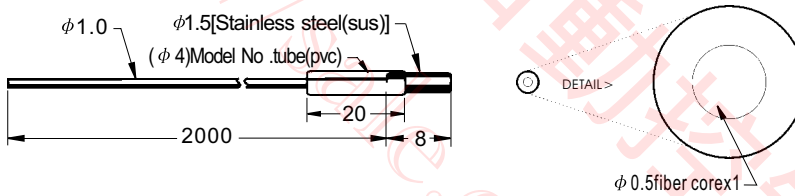
#### Dimensions (mm)



- Shape of fiber head: M3 (standard)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi 0.025$  opaque object
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 270     | 50       | 24        | 16           |
| ● S T D: | 140     | 25       | 12        | 8            |
| ● FAST:  | 100     | 16       | 8         | 5            |
| ● S - D: | 49      | -        | -         | -            |
- Allowable bending radius: R25

### PT-D15F042S-2

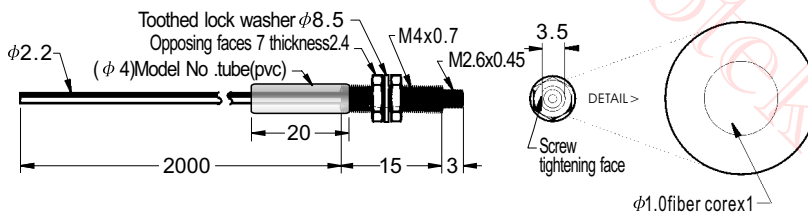
#### Dimensions (mm)



- Shape of fiber head: 1.5 (standard)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi 0.02$  gold wire
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 270     | 50       | 24        | 16           |
| ● S T D: | 140     | 25       | 12        | 8            |
| ● FAST:  | 100     | 16       | 8         | 5            |
| ● S - D: | 49      | -        | -         | -            |
- Allowable bending radius: R25

### PT-M4P012S-D

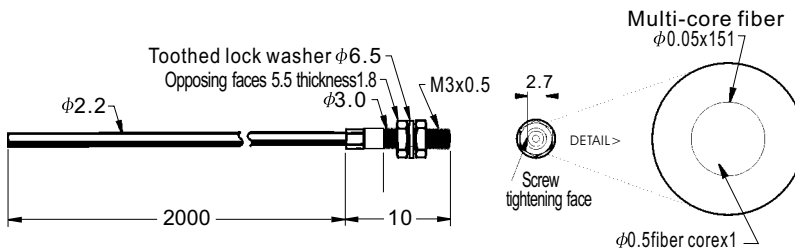
#### Dimensions (mm)



- Shape of fiber head: M4 (standard)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi 0.03$  opaque object
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 570     | 90       | 56        | 42           |
| ● S T D: | 290     | 45       | 28        | 21           |
| ● FAST:  | 200     | 30       | 20        | 15           |
| ● S - D: | 100     | -        | -         | -            |
- Allowable bending radius: R1

### PT-M3T042S

#### Dimensions (mm)



- Shape of fiber head: M3(Sharp bending)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi 0.02$  opaque object
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 160     | 16       | 10        | 8            |
| ● S T D: | 80      | 8        | 5         | 4            |
| ● FAST:  | 55      | 5        | 3         | 2.5          |
| ● S - D: | 28      | -        | -         | -            |
- Allowable bending radius: R1

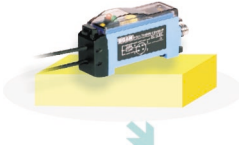
**Notes:** 1) The sensing range is specified for white non-glossy paper(100x100mm)as the object.

2) please take care that the sensing of the free-cut type fiber may be reduced by 20% max. Depending upon how the fiber is cut.

3) The minimum sensing from the rated sensing range.

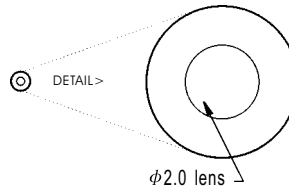
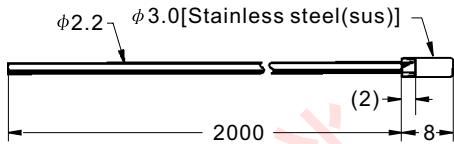
# Plastic Fibers

## Opposed Mode Individual Cables



### PT-D3F022S

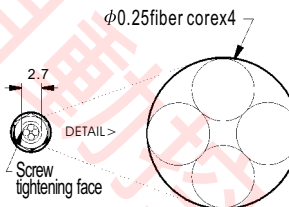
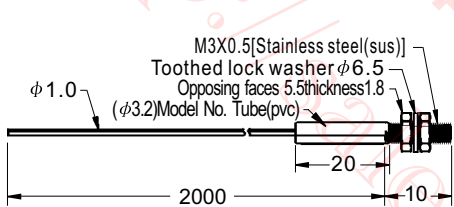
#### Dimensions (mm)



- Shape of fiber head:  $\phi 3$  (Sharp bending)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity: $\phi 0.02$  opaque object
  - Range:
- |        | Red LED | Blue LED | Green LED | Infrared LED |
|--------|---------|----------|-----------|--------------|
| LONG:  | 1200    | 240      | 120       | 110          |
| S T D: | 600     | 120      | 60        | 55           |
| FAST:  | 420     | 90       | 40        | 35           |
| S - D: | 210     | -        | -         | -            |
- Allowable bending radius: R1

### PT-M3T202S

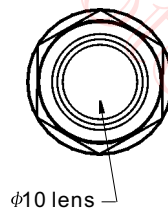
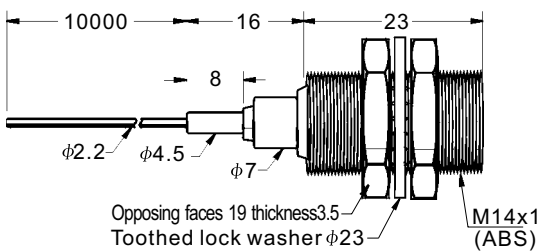
#### Dimensions (mm)



- Shape of fiber head: M3 (Flexible)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity: $\phi 0.02$  gold wire
  - Range:
- |        | Red LED | Blue LED | Green LED | Infrared LED |
|--------|---------|----------|-----------|--------------|
| LONG:  | 250     | 32       | 18        | 14           |
| S T D: | 100     | 16       | 9         | 7            |
| FAST:  | 75      | 12       | 7         | 5            |
| S - D: | 35      | -        | -         | -            |
- Allowable bending radius: R4

### PT-M14T1010S

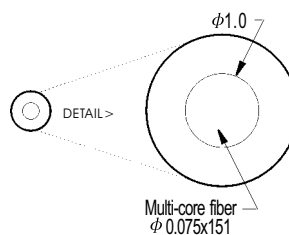
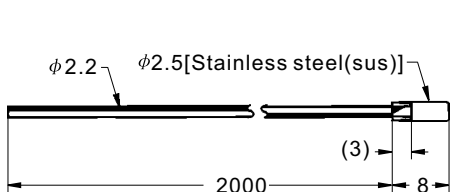
#### Dimensions (mm)



- Shape of fiber head: M4 (standard)
  - Fiber cable length: 10000(Free-cut)
  - Min.sensing object at the maximum sensitivity: $\phi 0.04$  opaque object
  - Range:
- |        | Red LED | Blue LED | Green LED | Infrared LED |
|--------|---------|----------|-----------|--------------|
| LONG:  | 19500   | 5400     | 2800      | 2400         |
| S T D: | 1400    | 2700     | 1400      | 1200         |
| FAST:  | 10000   | 1900     | 1000      | 900          |
| S - D: | 3800    | -        | -         | (Note3)-     |
- Allowable bending radius: R25

### PT-D2.5F012S-1

#### Dimensions (mm)



- Shape of fiber head:  $\phi 2.5$ (Sharp bending)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity: $\phi 0.03$  opaque object
  - Range:
- |        | Red LED | Blue LED | Green LED | Infrared LED |
|--------|---------|----------|-----------|--------------|
| LONG:  | 570     | 90       | 56        | 42           |
| S T D: | 290     | 45       | 28        | 21           |
| FAST:  | 200     | 30       | 20        | 15           |
| S - D: | 100     | -        | -         | -            |
- Allowable bending radius: R1

**Notes:** 1) The sensing range is specified for white non-glossy paper(100x100mm)as the object.

2) please take care that the sensing of the free-cut type fiber may be reduced by 20% max. Depending upon how the fiber is cut.

3) The minimum sensing from the rated sensing range.

# Opposed Mode

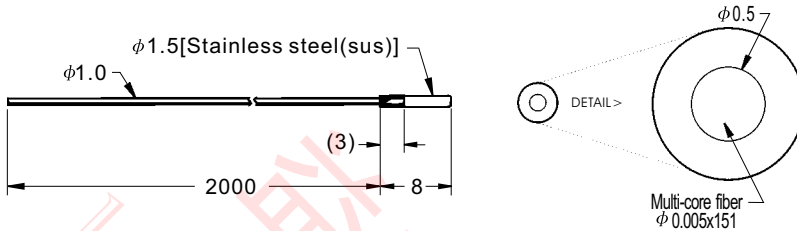
# Plastic Fibers

## Individual Cables



### PT-D1.5F042S-1

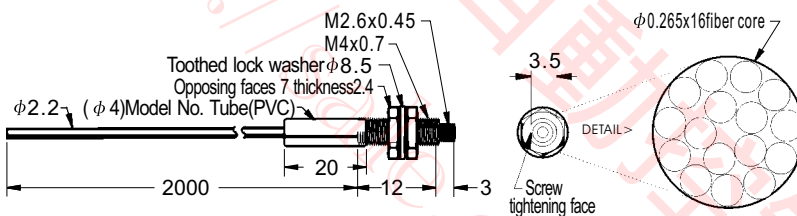
#### Dimensions (mm)



- Shape of fiber head: M3(Sharp bending)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi 0.02$  opaque object
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 160     | 16       | 10        | 8            |
| ● S T D: | 80      | 8        | 5         | 4            |
| ● FAST:  | 55      | 5        | 3         | 2.5          |
| ● S - D: | 28      | -        | -         | -            |
- Allowable bending radius: R1

### PT-M4P192S-A

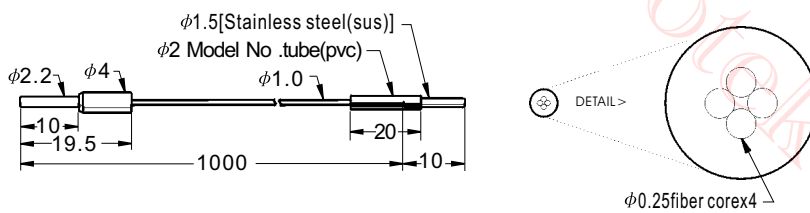
#### Dimensions (mm)



- Shape of fiber head: M4 (Flexible)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi 0.04$  opaque object
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 650     | 130      | 70        | 56           |
| ● S T D: | 320     | 65       | 35        | 28           |
| ● FAST:  | 230     | 45       | 25        | 20           |
| ● S - D: | 110     | -        | -         | -            |
- Allowable bending radius: R4

### PT-D2.3P201S-10

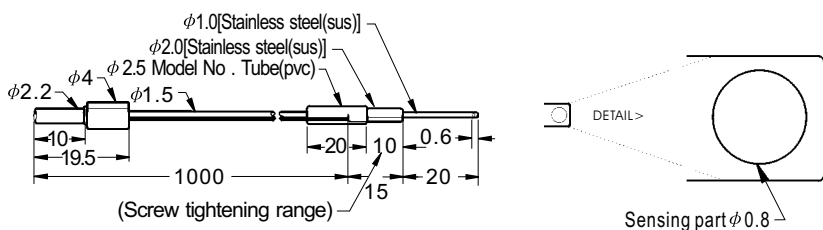
#### Dimensions (mm)



- Shape of fiber head: 1.5 (Flexible)
  - Fiber cable length: 1000
  - Min.sensing object at the maximum sensitivity:  $\phi 0.02$  opaque object
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 280     | 36       | 20        | 18           |
| ● S T D: | 120     | 18       | 10        | 9            |
| ● FAST:  | 90      | 14       | 8         | 7            |
| ● S - D: | 42      | -        | -         | -            |
- Allowable bending radius: R4

### PT-D2V131S-20

#### Dimensions (mm)

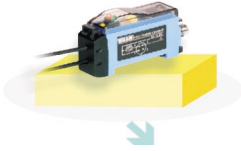


- Shape of fiber head:  $\phi 1$ (Standard)
  - Fiber cable length: 1000
  - Min.sensing object at the maximum sensitivity:  $\phi 0.02$  opaque object
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 390     | 50       | 26        | 44           |
| ● S T D: | 180     | 25       | 13        | 22           |
| ● FAST:  | 125     | 16       | 8         | 15           |
| ● S - D: | 63      | -        | -         | -            |
- Allowable bending radius: R25

- Notes:**
- 1) The sensing range is specified for white non-glossy paper(100x100mm)as the object.
  - 2) please take care that the sensing of the free-cut type fiber may be reduced by 20% max. Depending upon how the fiber is cut.
  - 3) The minimum sensing from the rated sensing range.

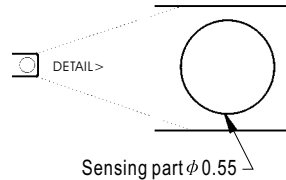
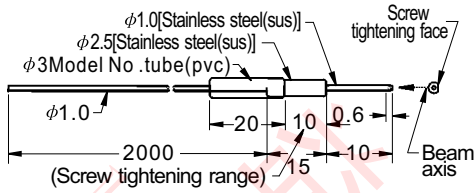
# Plastic Fibers

## Opposed Mode Individual Cables



### PT-D2.5V072S-10

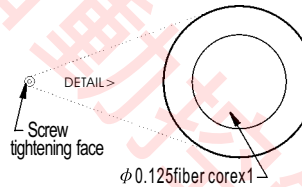
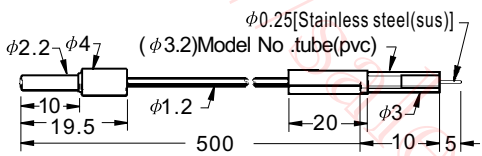
#### Dimensions (mm)



- Shape of fiber head:  $\phi 1$  (standard)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi 0.02$  opaque object
  - Range:
- |        | Red LED | Blue LED | Green LED | Infrared LED |
|--------|---------|----------|-----------|--------------|
| LONG:  | 175     | 28       | 14        | 10           |
| S T D: | 80      | 14       | 7         | 5            |
| FAST:  | 60      | 10       | 5         | 3            |
| S - D: | 27      | -        | -         | -            |
- Allowable bending radius: R25

### PT-D3P080.5S-5

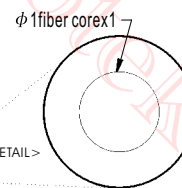
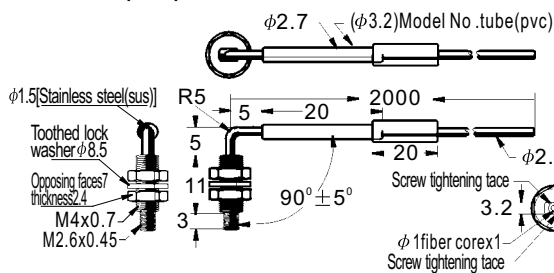
#### Dimensions (mm)



- Shape of fiber head:  $\phi 0.25$  (Special use)
  - Fiber cable length: 500
  - Min.sensing object at the maximum sensitivity:  $\phi 0.02$  opaque object
  - Range:
- |        | Red LED | Blue LED | Green LED | Infrared LED |
|--------|---------|----------|-----------|--------------|
| LONG:  | 18      | 3        | 1         | 4            |
| S T D: | 10      | 2        | -         | 2            |
| FAST:  | 8       | 1        | -         | 1.5          |
| S - D: | 3       | -        | -         | -            |
- Allowable bending radius: R5

### PT-M4A012S-E

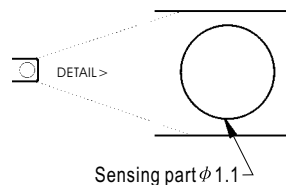
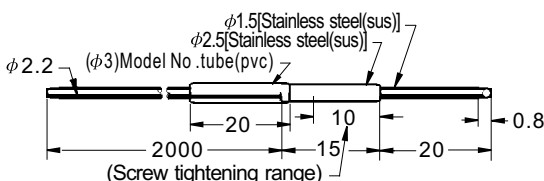
#### Dimensions (mm)



- Shape of fiber head: M4 (standard)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi 0.04$  opaque object
  - Range:
- |        | Red LED | Blue LED | Green LED | Infrared LED |
|--------|---------|----------|-----------|--------------|
| LONG:  | 530     | 85       | 44        | 32           |
| S T D: | 230     | 42       | 22        | 16           |
| FAST:  | 150     | 28       | 16        | 12           |
| S - D: | 80      | -        | -         | -            |
- Allowable bending radius: R25

### PT-D2.5V092S-20

#### Dimensions (mm)

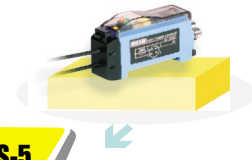


- Shape of fiber head:  $\phi 1.5$  (Standard)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi 0.05$  opaque object
  - Range:
- |        | Red LED | Blue LED | Green LED | Infrared LED |
|--------|---------|----------|-----------|--------------|
| LONG:  | 400     | 80       | 40        | 30           |
| S T D: | 200     | 40       | 20        | 15           |
| FAST:  | 140     | 28       | 14        | 12           |
| S - D: | 70      | -        | -         | -            |
- Allowable bending radius: R25

- Notes:** 1) The sensing range is specified for white non-glossy paper(100x100mm)as the object.  
 2) please take care that the sensing of the free-cut type fiber may be reduced by 20% max. Depending upon how the fiber is cut.  
 3) The minimum sensing from the rated sensing range.

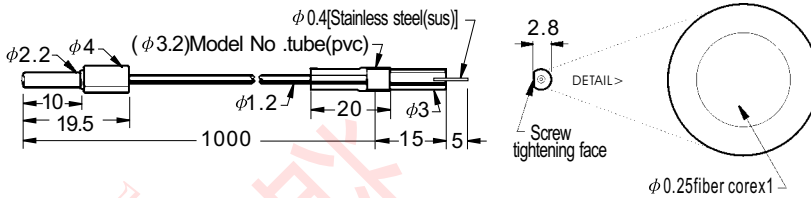
# Opposed Mode Individual Cables

# Plastic Fibers



## PT-D3P061S-5

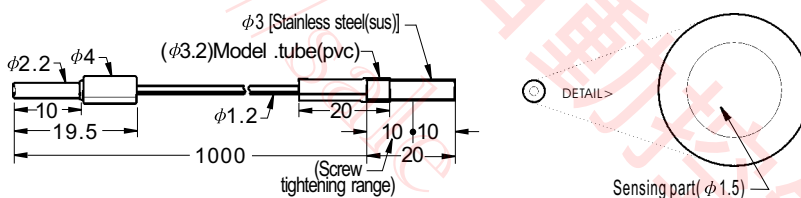
### Dimensions (mm)



- Shape of fiber head: φ0.4 (Special use)
  - Fiber cable length: 1000
  - Min.sensing object at the maximum sensitivity: φ0.02 opaque object
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 80      | 14       | 6         | 10           |
| ● S T D: | 50      | 7        | 3         | 5            |
| ● FAST:  | 36      | 4        | 2         | 3            |
| ● S - D: | 15      | -        | -         | -            |
- Allowable bending radius: R5

## PT-D3F051S

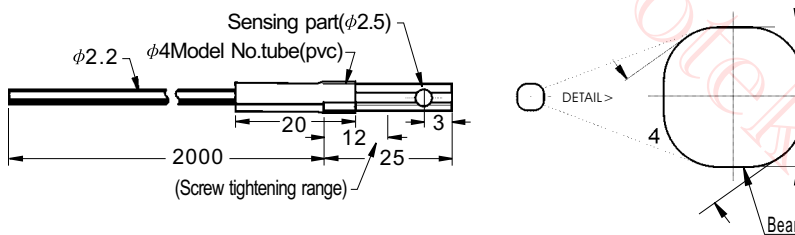
### Dimensions (mm)



- Shape of fiber head: M4 (Environment resistant)
  - Fiber cable length: 1000(Free-cut)
  - Min.sensing object at the maximum sensitivity: φ0.02 gold wire
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 550     | 100      | 50        | 420          |
| ● S T D: | 280     | 50       | 25        | 210          |
| ● FAST:  | 200     | 35       | 18        | 160          |
| ● S - D: | 90      | -        | -         | -            |
- Allowable bending radius: R25

## PT-D4V032S

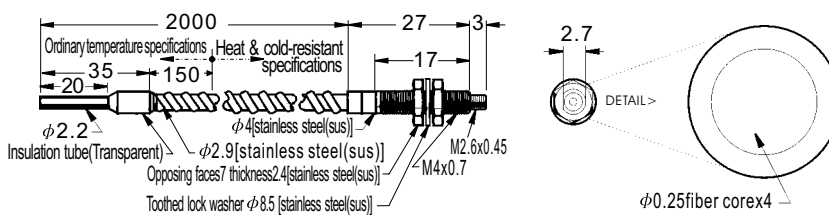
### Dimensions (mm)



- Shape of fiber head: φ4 (Special use)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity: φ0.06 opaque object
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 2000    | 400      | 200       | 150          |
| ● S T D: | 1000    | 200      | 100       | 75           |
| ● FAST:  | 800     | 130      | 65        | 40           |
| ● S - D: | 350     | -        | -         | -            |
- Allowable bending radius: R25

## PT-M4P202C-F

### Dimensions (mm)

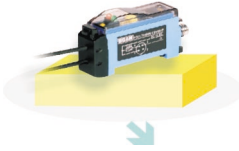


- Shape of fiber head: M4(Environment resistant)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity: φ0.04 opaque object
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 550     | 100      | 50        | 420          |
| ● S T D: | 280     | 50       | 25        | 210          |
| ● FAST:  | 200     | 35       | 18        | 160          |
| ● S - D: | 90      | -        | -         | -            |
- Allowable bending radius: Fiber R25 sleeve R10)

- Notes:**
- 1) The sensing range is specified for white non-glossy paper(100x100mm)as the object.
  - 2) please take care that the sensing of the free-cut type fiber may be reduced by 20% max. Depending upon how the fiber is cut.
  - 3) The minimum sensing from the rated sensing range.

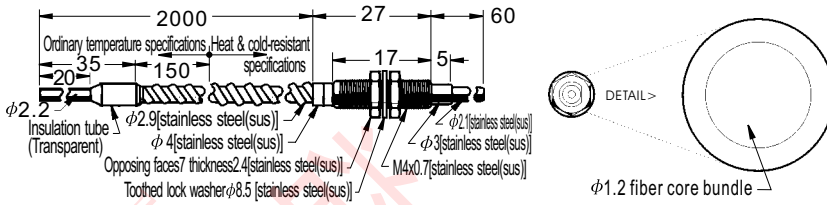
# Plastic Fibers

## Opposed Mode Individual Cables



### PT-M4P112C-60

#### Dimensions (mm)

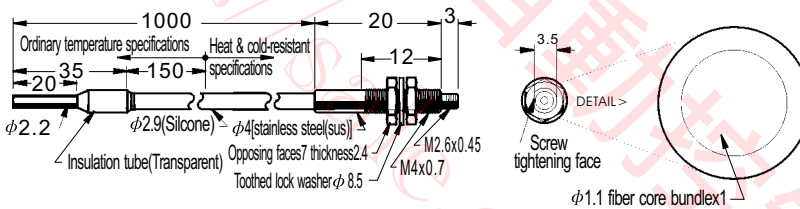


- Shape of fiber head: M4 (Environment resistant)
- Fiber cable length: 2000(Free-cut)
- Min.sensing object at the maximum sensitivity:  $\phi$  0.04 opaque object
- Range:
 

	Red LED	Blue LED	Green LED	Infrared LED
● LONG:	550	100	50	420
● S T D:	280	50	25	210
● FAST:	200	35	18	160
● S - D:	90	-	-	-
- Allowable bending radius: Fiber R25 sleeve R10)

### PT-M4P091S-A

#### Dimensions (mm)

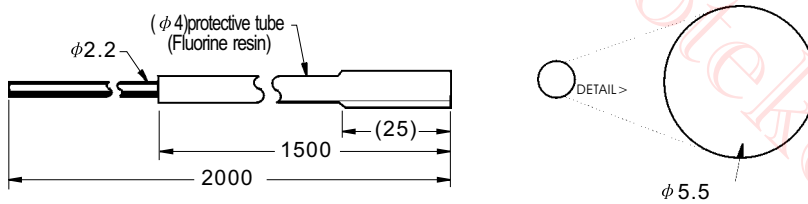


- Shape of fiber head: M4 (Environment resistant)
- Fiber cable length: 1000
- Min.sensing object at the maximum sensitivity:  $\phi$  0.04 opaque object
- Range:
 

	Red LED	Blue LED	Green LED	Infrared LED
● LONG:	550	100	50	420
● S T D:	280	50	25	210
● FAST:	200	35	18	160
● S - D:	90	-	-	-
- Allowable bending radius: R25

### PT-D5.5F2S

#### Dimensions (mm)

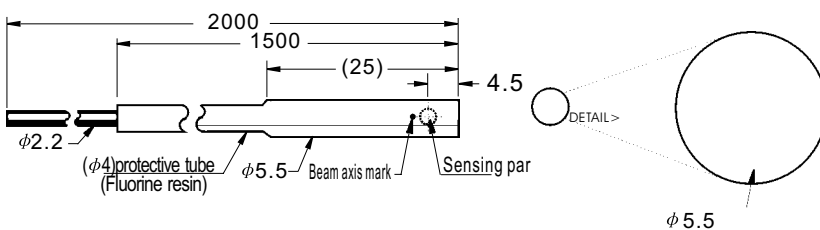


- Shape of fiber head:  $\phi$  5.5(Environment resistant)
- Fiber cable length: 2000(Free-cut)Note3
- Min.sensing object at the maximum sensitivity:  $\phi$  0.08 opaque object
- Range:
 

	Red LED	Blue LED	Green LED	Infrared LED
● LONG:	3500	160	160	400
● S T D:	1500	80	80	200
● FAST:	1000	50	50	150
● S - D:	530	-	-	-
- Allowable bending radius: R30

### PT-D5.5V2S

#### Dimensions (mm)



- Shape of fiber head:  $\phi$  5.5(Environment resistant)
- Fiber cable length: 2000(Free-cut)Note3
- Min.sensing object at the maximum sensitivity:  $\phi$  0.08 opaque object
- Range:
 

	Red LED	Blue LED	Green LED	Infrared LED
● LONG:	800	120	80	75
● S T D:	400	60	40	38
● FAST:	280	35	25	24
● S - D:	140	-	-	-
- Allowable bending radius: R30

- Notes:** 1) The sensing range is specified for white non-glossy paper(100x100mm)as the object.  
 2) please take care that the sensing of the free-cut type fiber may be reduced by 20% max. Depending upon how the fiber is cut.  
 3) The minimum sensing from the rated sensing range.



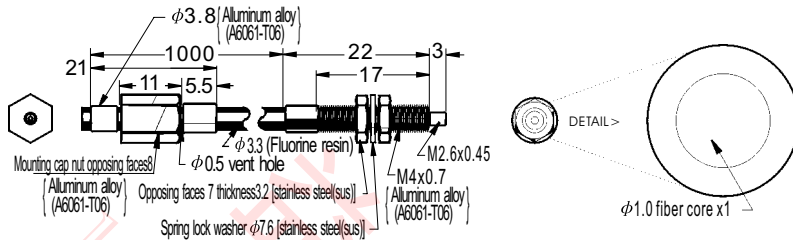
# Opposed Mode Individual Cables

# Plastic Fibers



## PT-M4P011S-3

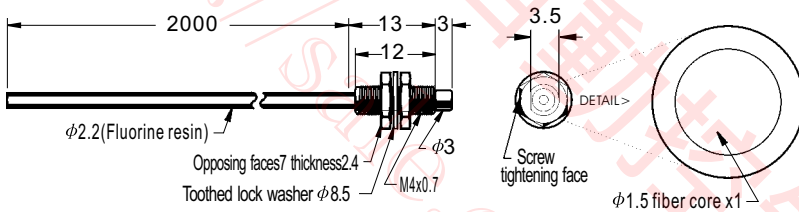
### Dimensions (mm)



- Shape of fiber head: M4 (Environment resistant)
  - Fiber cable length: 1000
  - Min.sensing object at the maximum sensitivity:  $\phi 0.02$  opaque object
  - Range:
- |        | Red LED | Blue LED | Green LED | Infrared LED |
|--------|---------|----------|-----------|--------------|
| LONG:  | 220     | 36       | 18        | 28           |
| S T D: | 110     | 18       | 9         | 14           |
| FAST:  | 75      | 12       | 6         | 10           |
| S - D: | 35      | -        | -         | -            |
- Allowable bending radius: R30

## PT-M4P052S-3

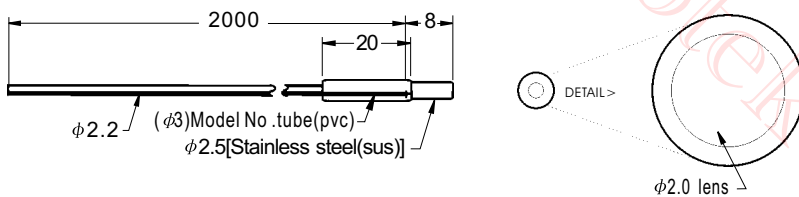
### Dimensions (mm)



- Shape of fiber head: M4 (Environment resistant)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi 0.06$  opaque object
  - Range:
- |        | Red LED | Blue LED | Green LED | Infrared LED |
|--------|---------|----------|-----------|--------------|
| LONG:  | 880     | 72       | 32        | 70           |
| S T D: | 440     | 36       | 16        | 35           |
| FAST:  | 300     | 26       | 10        | 25           |
| S - D: | 155     | -        | -         | -            |
- Allowable bending radius: R25

## PT-D2.5F022S

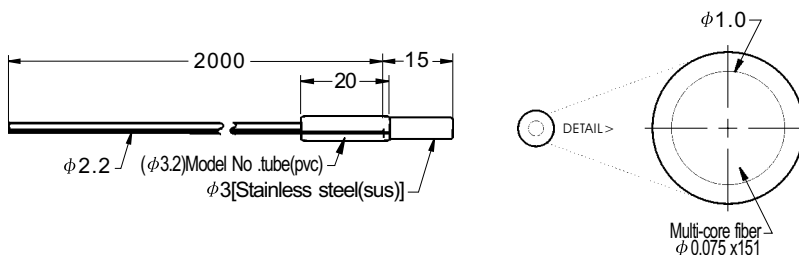
### Dimensions (mm)



- Shape of fiber head:  $\phi 2.5$  (standard)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi 0.02$  opaque object
  - Range:
- |        | Red LED | Blue LED | Green LED | Infrared LED |
|--------|---------|----------|-----------|--------------|
| LONG:  | 1600    | 400      | 200       | 155          |
| S T D: | 800     | 200      | 100       | 77           |
| FAST:  | 580     | 130      | 65        | 55           |
| S - D: | 280     | -        | -         | -            |
- Allowable bending radius: R25

## PT-D3F012S

### Dimensions (mm)

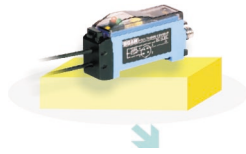


- Shape of fiber head:  $\phi 3$  (sharp bending)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi 0.05$  opaque object
  - Range:
- |        | Red LED | Blue LED | Green LED | Infrared LED |
|--------|---------|----------|-----------|--------------|
| LONG:  | 570     | 90       | 56        | 42           |
| S T D: | 290     | 45       | 28        | 21           |
| FAST:  | 200     | 30       | 20        | 15           |
| S - D: | 100     | -        | -         | -            |
- Allowable bending radius: R1

- Notes:**
- 1) The sensing range is specified for white non-glossy paper(100x100mm)as the object.
  - 2) please take care that the sensing of the free-cut type fiber may be reduced by 20% max. Depending upon how the fiber is cut.
  - 3) The minimum sensing from the rated sensing range.

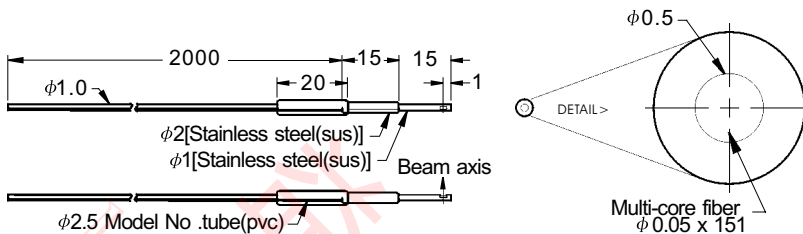
# Plastic Fibers

## Opposed Mode Individual Cables



### PT-D2V0.52S

#### Dimensions (mm)



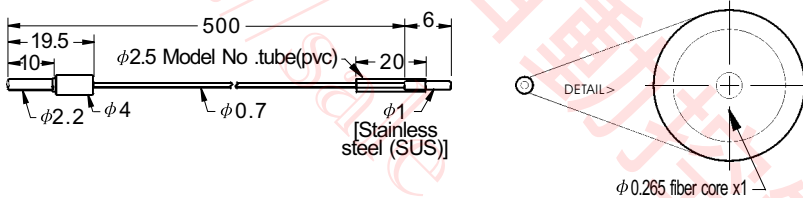
- Shape of fiber head: φ1 (Sharp bending)
- Fiber cable length: 2000(Free-cut)
- Min.sensing object at the maximum sensitivity: φ0.02 opaque object
- Range:

	Red LED
LONG:	90
S T D:	40
FAST:	30
S - D:	15

- Allowable bending radius: R1

### PT-D1F330.5S

#### Dimensions (mm)



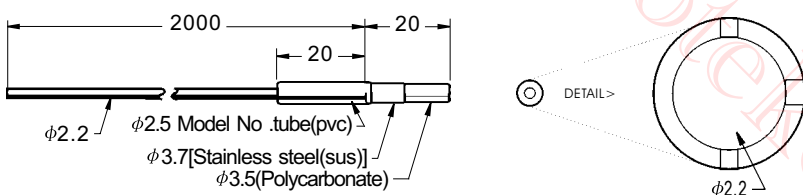
- Shape of fiber head: φ1 (Flexible)
- Fiber cable length: 500
- Min.sensing object at the maximum sensitivity: φ0.02 opaque object
- Range:

	Red LED	Blue LED	Green LED	Infrared LED
LONG:	80	14	6	14
S T D:	40	7	3	7
FAST:	30	4	2	4
S - D:	17	-	-	-

- Allowable bending radius: R4

### PT-D3.5F532S

#### Dimensions (mm)



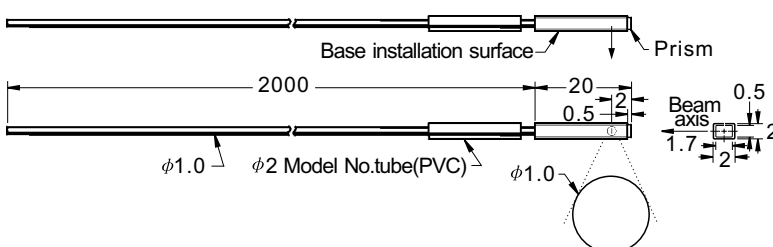
- Shape of fiber head: φ3.5 (Special use)
- Fiber cable length: 2000(Free-cut)
- Min.sensing object at the maximum sensitivity: φ0.06 opaque object
- Range:

	Red LED	Blue LED	Green LED	Infrared LED
LONG:	2000	400	200	150
S T D:	1000	200	100	75
FAST:	800	130	65	40
S - D:	350	-	-	-

- Allowable bending radius: R25

### PT-D2F662S

#### Dimensions (mm)



- Shape of fiber head: W2xH1.5xD15 (Special use)

- Fiber cable length: 2000(Free-cut)
- Min.sensing object at the maximum sensitivity: φ0.02 opaque object
- Range:

	Red LED	Blue LED
LONG:	500	80
S T D:	250	35
FAST:	180	10
S - D:	100	-

- Allowable bending radius: R10

**Notes:** 1) The sensing range is specified for white non-glossy paper(100x100mm)as the object.

2) please take care that the sensing of the free-cut type fiber may be reduced by 20% max. Depending upon how the fiber is cut.

3) The minimum sensing from the rated sensing range.

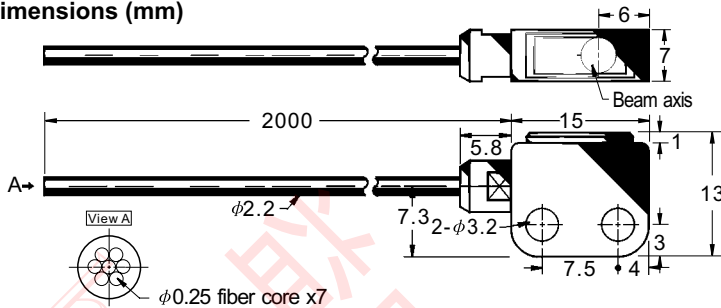
# Opposed Mode Individual Cables

# Plastic Fibers



## PT-DLE80672S

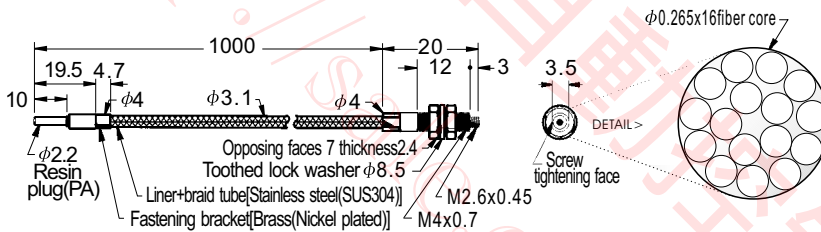
### Dimensions (mm)



- Shape of fiber head: W7xH15xD13 (Environment resistant)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi 4$  opaque object
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 3500    | 320      | 160       | 320          |
| ● S T D: | 1500    | 160      | 80        | 160          |
| ● FAST:  | 1000    | 120      | 60        | 120          |
| ● S - D: | 530     | -        | -         | -            |
- Allowable bending radius: R25

## PT-M4P191S-A

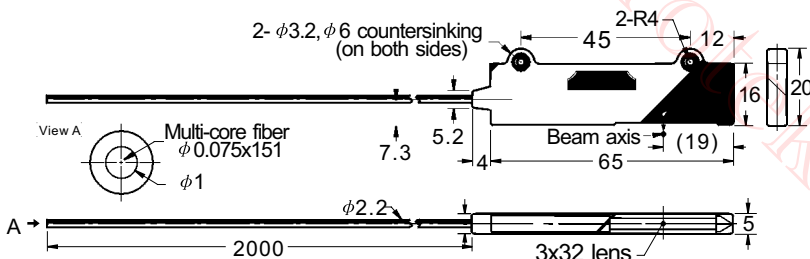
### Dimensions (mm)



- Shape of fiber head: M4 (Special use)
  - Fiber cable length: 1000
  - Min.sensing object at the maximum sensitivity:  $\phi 0.05$  opaque object
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 650     | 130      | 64        | 130          |
| ● S T D: | 320     | 64       | 32        | 64           |
| ● FAST:  | 230     | 45       | 22        | 45           |
| ● S - D: | 110     | -        | -         | -            |
- Allowable bending radius: R10

## PT-DN592S

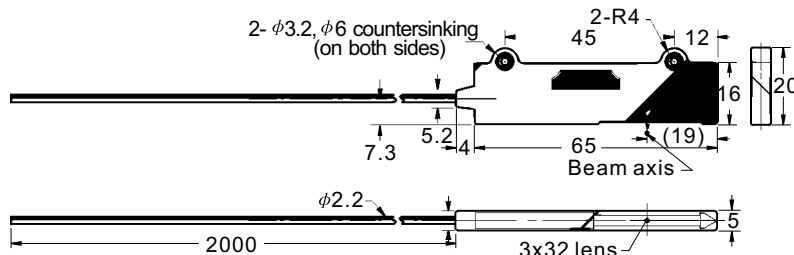
### Dimensions (mm)



- Shape of fiber head: W5xH69xD20 (Sharp bending)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi 0.03$  opaque object
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 3500    | 2400     | 1200      | 800          |
| ● S T D: | 3500    | 1200     | 600       | 400          |
| ● FAST:  | 3500    | 700      | 350       | 240          |
| ● S - D: | 3500    | -        | -         | -            |
- Allowable bending radius: R1

## PT-DN592S-1

### Dimensions (mm)



- Shape of fiber head: W5xH69xD20 (Special use)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi 0.03$  opaque object
  - Range:
- |          | Red LED | Blue LED | Green LED | Infrared LED |
|----------|---------|----------|-----------|--------------|
| ● LONG:  | 3500    | 2400     | 1200      | 800          |
| ● S T D: | 3500    | 1200     | 600       | 400          |
| ● FAST:  | 3500    | 700      | 350       | 240          |
| ● S - D: | 3500    | -        | -         | -            |
- Allowable bending radius: R10

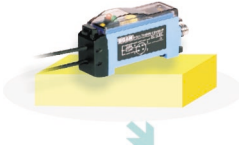
Notes: 1) The sensing range is specified for white non-glossy paper(100x100mm)as the object.

2) please take care that the sensing of the free-cut type fiber may be reduced by 20% max. Depending upon how the fiber is cut.

3) The minimum sensing from the rated sensing range.

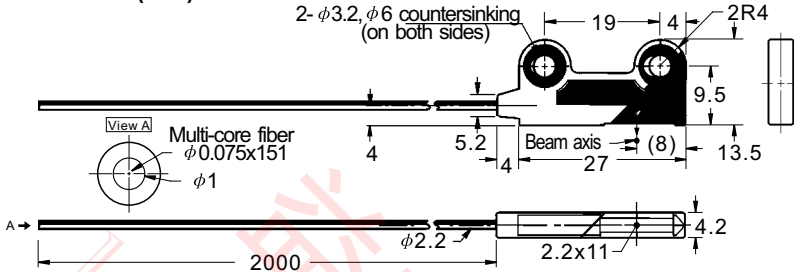
# Plastic Fibers

## Opposed Mode Individual Cables



### PT-D0602S

#### Dimensions (mm)

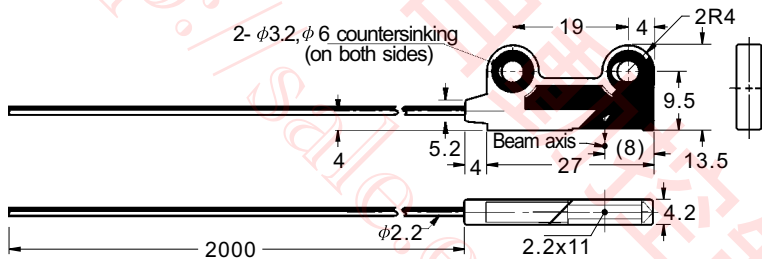


- Shape of fiber head: W4.2xH31xD13.5 (Sharp bending)
- Fiber cable length: 2000(Free-cut)
- Min.sensing object at the maximum sensitivity:  $\phi 0.25$  opaque object
- Range:
 

	Red LED	Blue LED	Green LED	Infrared LED
LONG:	3500	600	300	220
S T D:	1500	300	150	110
FAST:	1100	220	110	80
S - D:	750	-	-	-
- Allowable bending radius: R1

### PT-D0602S-1

#### Dimensions (mm)

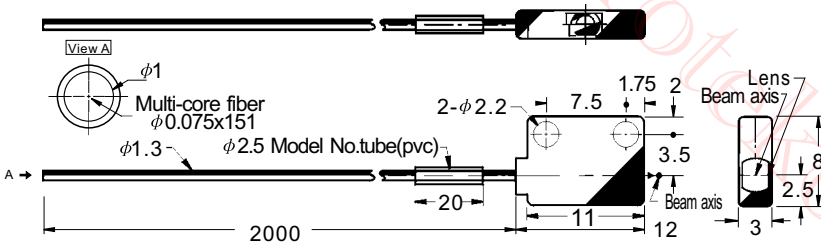


- Shape of fiber head: W4.2xH31xD13.5 (Sharp bending)
- Fiber cable length: 2000(Free-cut)
- Min.sensing object at the maximum sensitivity:  $\phi 0.25$  opaque object
- Range:
 

	Red LED	Blue LED	Green LED	Infrared LED
LONG:	3500	600	300	220
S T D:	1500	300	150	110
FAST:	1100	220	110	80
S - D:	750	-	-	-
- Allowable bending radius: R10

### PT-DL612S

#### Dimensions (mm)

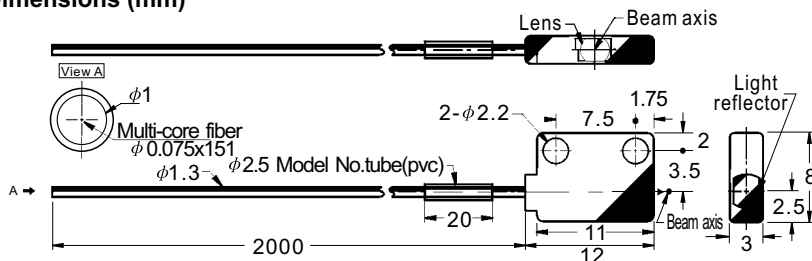


- Shape of fiber head: W3xH12xD8 (Sharp bending)
- Fiber cable length: 2000(Free-cut)
- Min.sensing object at the maximum sensitivity:  $\phi 0.08$  opaque object
- Range:
 

	Red LED	Blue LED	Green LED	Infrared LED
LONG:	2500	400	200	180
S T D:	1200	200	100	90
FAST:	850	140	70	65
S - D:	410	-	-	-
- Allowable bending radius: R1

### PT-DL612S-1

#### Dimensions (mm)



- Shape of fiber head: W3xH12xD8 (Sharp bending)
- Fiber cable length: 2000(Free-cut)
- Min.sensing object at the maximum sensitivity:  $\phi 0.03$  opaque object
- Range:
 

	Red LED	Blue LED	Green LED	Infrared LED
LONG:	1500	240	120	100
S T D:	700	120	60	50
FAST:	500	80	40	30
S - D:	210	-	-	-
- Allowable bending radius: R1

- Notes:**
- 1) The sensing range is specified for white non-glossy paper(100x100mm)as the object.
  - 2) please take care that the sensing of the free-cut type fiber may be reduced by 20% max. Depending upon how the fiber is cut.
  - 3) The minimum sensing from the rated sensing range.

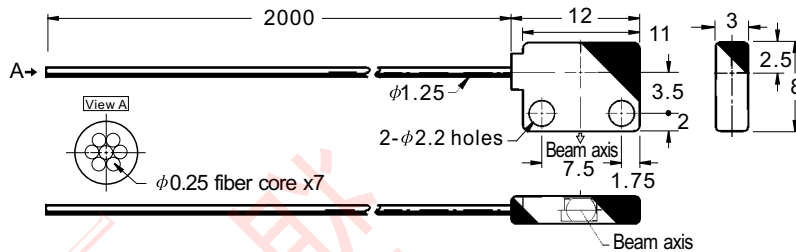
# Opposed Mode Individual Cables

# Plastic Fibers



## PT-DL612S-3

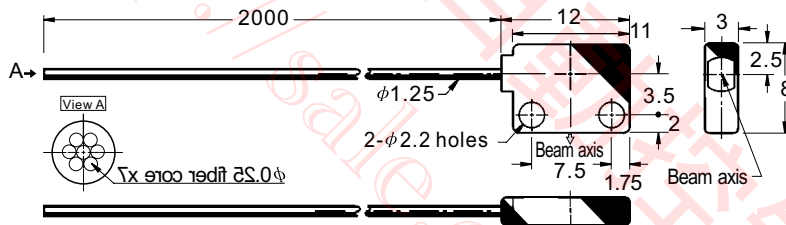
### Dimensions (mm)



- Shape of fiber head: W3xH12xD8 (Sharp bending)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi 0.03$  opaque object
  - Range:
- |        | Red LED | Blue LED | Green LED | Infrared LED |
|--------|---------|----------|-----------|--------------|
| LONG:  | 1600    | 400      | 200       | 140          |
| S T D: | 800     | 200      | 100       | 70           |
| FAST:  | 600     | 140      | 65        | 50           |
| S - D: | 280     | -        | -         | -            |
- Allowable bending radius: R4

## PT-DL612S-4

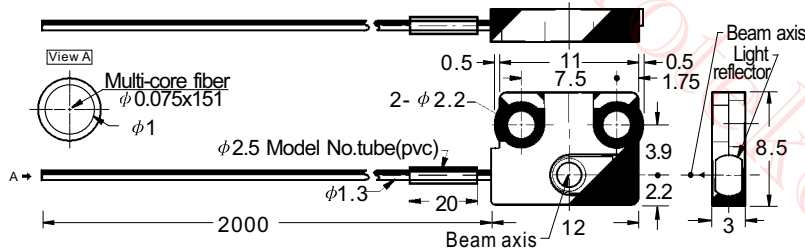
### Dimensions (mm)



- Shape of fiber head: W3xH8xD12 (Sharp bending)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi 0.03$  opaque object
  - Range:
- |        | Red LED | Blue LED | Green LED | Infrared LED |
|--------|---------|----------|-----------|--------------|
| LONG:  | 2700    | 560      | 200       | 180          |
| S T D: | 1400    | 280      | 100       | 90           |
| FAST:  | 1000    | 200      | 65        | 65           |
| S - D: | 490     | -        | -         | -            |
- Allowable bending radius: R4

## PT-DU622S

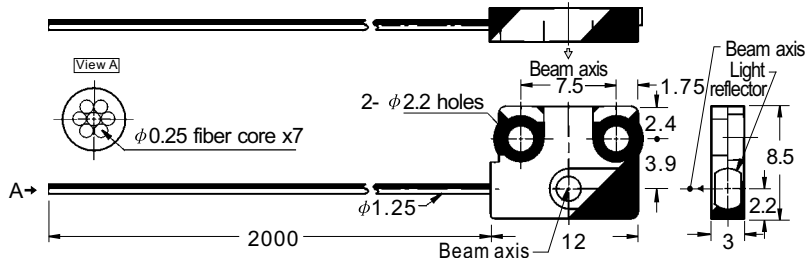
### Dimensions (mm)



- Shape of fiber head: W8.5xH12xD3 (Sharp bending)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi 0.04$  opaque object
  - Range:
- |        | Red LED | Blue LED | Green LED | Infrared LED |
|--------|---------|----------|-----------|--------------|
| LONG:  | 700     | 80       | 40        | 36           |
| S T D: | 330     | 40       | 20        | 18           |
| FAST:  | 240     | 25       | 13        | 12           |
| S - D: | 120     | -        | -         | -            |
- Allowable bending radius: R1

## PT-DU622S-1

### Dimensions (mm)

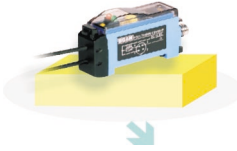


- Shape of fiber head: W8.5xH12xD3 (Sharp bending)
  - Fiber cable length: 2000(Free-cut)
  - Min.sensing object at the maximum sensitivity:  $\phi 0.03$  opaque object
  - Range:
- |        | Red LED | Blue LED | Green LED | Infrared LED |
|--------|---------|----------|-----------|--------------|
| LONG:  | 800     | 120      | 60        | 46           |
| S T D: | 400     | 60       | 30        | 23           |
| FAST:  | 300     | 40       | 22        | 16           |
| S - D: | 140     | -        | -         | -            |
- Allowable bending radius: R4

- Notes:**
- 1) The sensing range is specified for white non-glossy paper(100x100mm)as the object.
  - 2) please take care that the sensing of the free-cut type fiber may be reduced by 20% max. Depending upon how the fiber is cut.
  - 3) The minimum sensing from the rated sensing range.

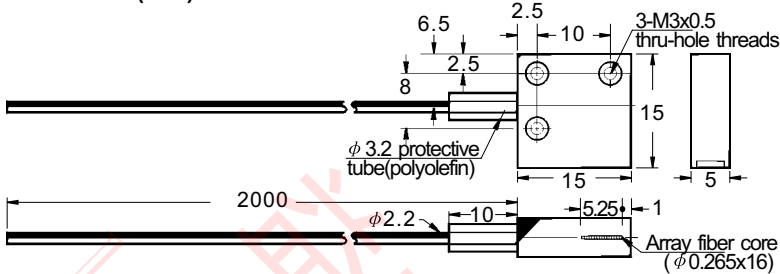
# Plastic Fibers

## Opposed Mode Individual Cables



### PT-DB642S

#### Dimensions (mm)

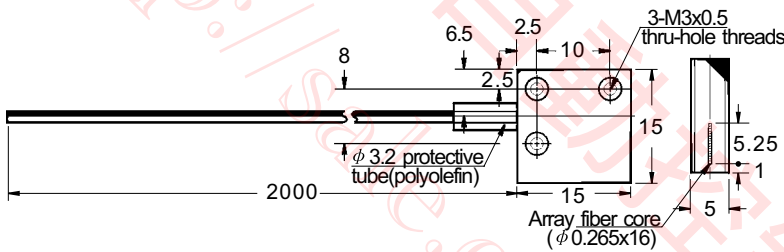


- Shape of fiber head: W5xH15xD15 (Special use)
- Fiber cable length: 2000(Free-cut)
- Min.sensing object at the maximum sensitivity: Horizontal 0.025 opaque object  
Vertical 0.45 opaque object
- Range:
 

	Red LED	Blue LED	Green LED	Infrared LED
LONG:	590	120	60	48
S T D:	290	60	30	24
FAST:	200	40	20	18
S - D:	100	-	-	-
- Allowable bending radius: R25

### PT-DC642S

#### Dimensions (mm)

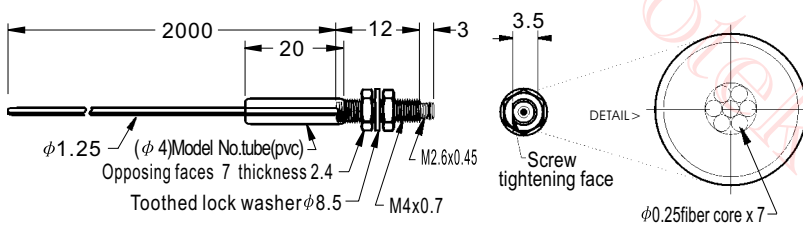


- Shape of fiber head: W5xH15xD15 (Special use)
- Fiber cable length: 2000(Free-cut)
- Min.sensing object at the maximum sensitivity: Horizontal 0.025 opaque object  
Vertical 0.45 opaque object
- Range:
 

	Red LED	Blue LED	Green LED	Infrared LED
LONG:	650	120	60	48
S T D:	330	60	30	24
FAST:	220	40	20	18
S - D:	115	-	-	-
- Allowable bending radius: R25

### PT-M4P322S-A

#### Dimensions (mm)

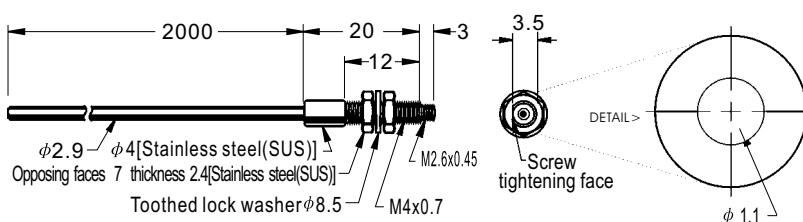


- Shape of fiber head: M3(special)
- Fiber cable length: 2000(Free-cut)
- Min.sensing object at the maximum sensitivity:  $\phi 0.02$  gold wire
- Range:
 

	Red LED	Blue LED	Green LED	Infrared LED
LONG:	110	22	12	7
S T D:	55	11	6	3.5
FAST:	42	8	4	2
S - D:	19	-	-	-
- Allowable bending radius: R25

### PT-M4P092S-A

#### Dimensions (mm)



- Shape of fiber head: M4(Environment Resistant)
- Fiber cable length: 1000
- Min.sensing object at the maximum sensitivity:  $\phi 0.04$  gold wire
- Range:
 

	Red LED	Blue LED	Green LED	Infrared LED
LONG:	550	100	50	420
S T D:	280	50	25	210
FAST:	200	35	18	160
S - D:	90	-	-	-
- Allowable bending radius: R25

- Notes:** 1) The sensing range is specified for white non-glossy paper(100x100mm)as the object.  
2) please take care that the sensing of the free-cut type fiber may be reduced by 20% max. Depending upon how the fiber is cut.  
3) The minimum sensing from the rated sensing range.

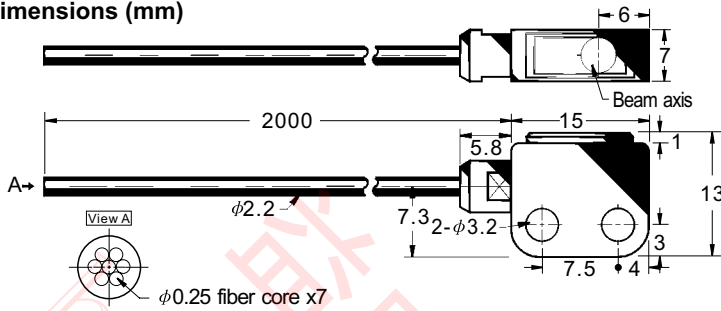
Opposed Mode  
Individual Cables

# Plastic Fibers



**PT-DLE80672S**

Dimensions (mm)



- Shape of fiber head: W7xH15xD13  
(Environment resistant)
- Fiber cable length: 2000(Free-cut)
- Min.sensing object at the maximum
- sensitivity:  $\phi$ 4 opaque object
- Range :

	Red LED	Blue LED	Green LED	Infrared LED
● LONG :	3500	320	160	320
● S T D :	1500	160	80	160
● FAST :	1000	120	60	120
● S - D :	530	-	-	-

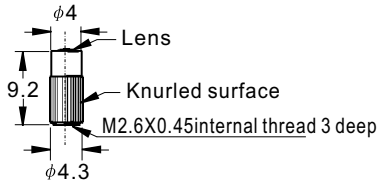
- Allowable bending radius: R25

- Notes:** 1) The sensing range is specified for white non-glossy paper(100x100mm)as the object.  
 2) please take care that the sensing of the free-cut type fiber may be reduced by 20% max. Depending upon how the fiber is cut.  
 3) The minimum sensing from the rated sensing range.

# Plastic Fibers

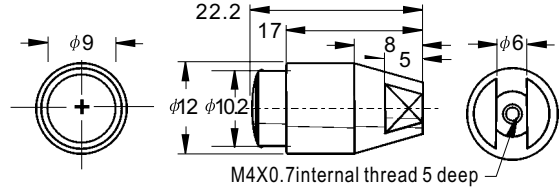
## Accessories

### S-FX-LE1 Expansion lens(Optional)



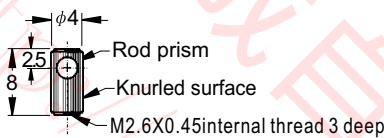
MATERIAL: ENCLOSURE.....BRASS(NICKEL PLATED)  
LENS.....GLASS

### S-FX-LE2 Super- expansion lens (Optional)



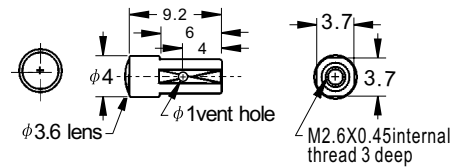
MATERIAL: ENCLOSURE.....STAINLESS STEEL (SUS303)  
LENS.....GLASS

### S-FX-SV1 Side-view lens(Optional)



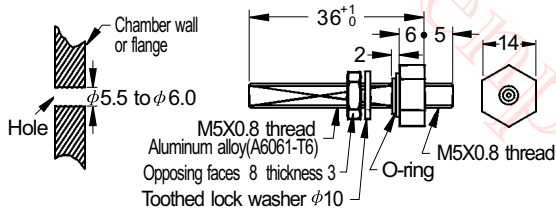
MATERIAL: ENCLOSURE.....BRASS(NICKEL PLATED)  
LENS.....GLASS

### S-FV-LE1 Expansion lens(For vacuum type fiber)

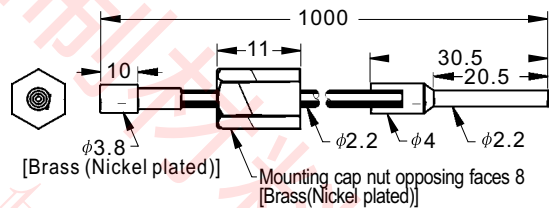


MATERIAL: ENCLOSURE.....ALUMINUM ALLOY(L A6061-T6)  
LENS.....BK-7

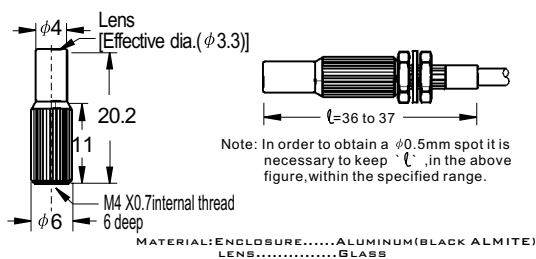
### S-FV-BR1 Photo-terminal(For vacuum type fiber)



### S-FT-J6 Fiber at atmospheric side (For vacuum type fiber)

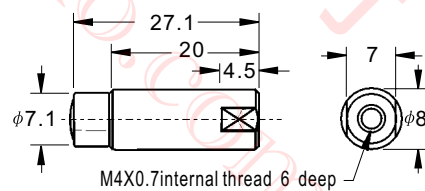


### S-FX-MR1 Pinpoint spot lens(Optional)



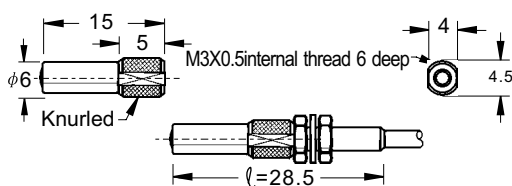
MATERIAL: ENCLOSURE.....ALUMINUM(BLACK ALMITE)  
LENS.....GLASS

### S-FX-MR2 Zoom lens (Optional)



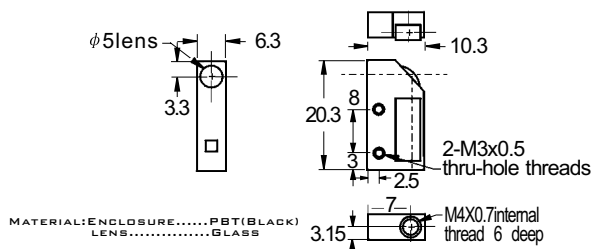
MATERIAL: ENCLOSURE.....ALUMINUM ALLOY(L BLACK ALMITE)  
LENS.....GLASS

### S-FX-MR3 Finest spot lens(Optional)



MATERIAL: ENCLOSURE.....ALUMINUM(BLACK ALMITE)  
LENS.....GLASS

### S-FX-MR5 Zoom lens (Optional)



MATERIAL: ENCLOSURE.....PBT(BLACK)  
LENS.....GLASS

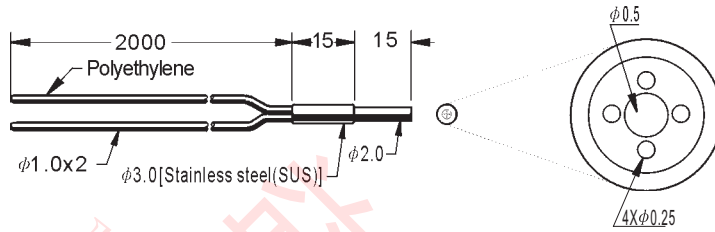


# Diffuse Mode Bifurcated Cables

# Plastic Fibers

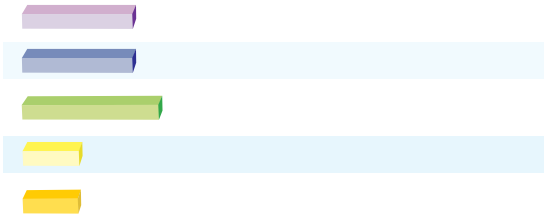


## Dimensions (mm)

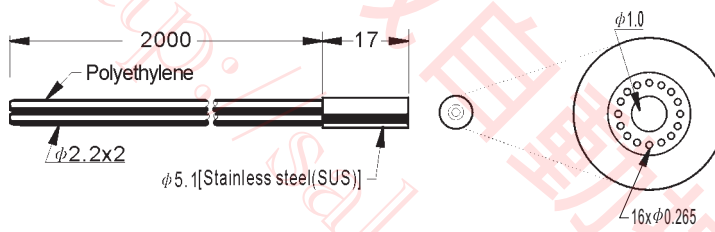


Model number	Length	Bundle	Sheath
PD-D2F422S	2000	4xφ0.25	Polyethylene

## Range (mm)

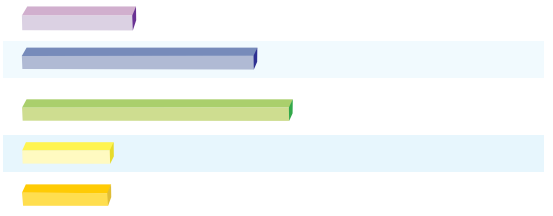


## Dimensions (mm)

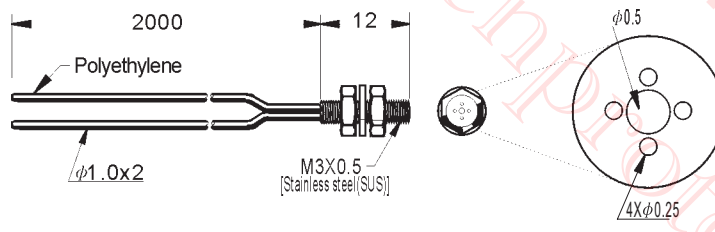


Model number	Length	Bundle	Sheath
PD-D5.1F432S	2000	16xφ0.265+1	Polyethylene

## Range (mm)

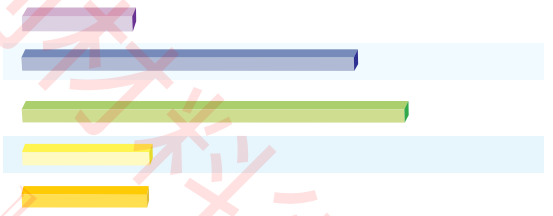


## Dimensions (mm)

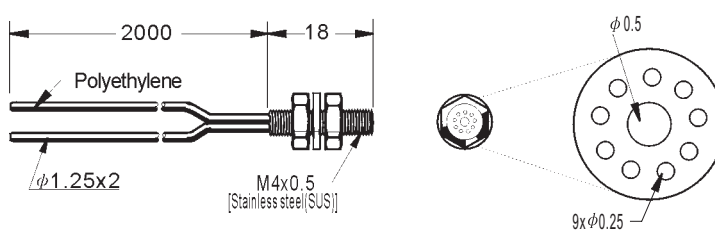


Model number	Length	Bundle	Sheath
PD-M3T422S	2000	4xφ0.25+0.5	Polyethylene

## Range (mm)



## Dimensions (mm)

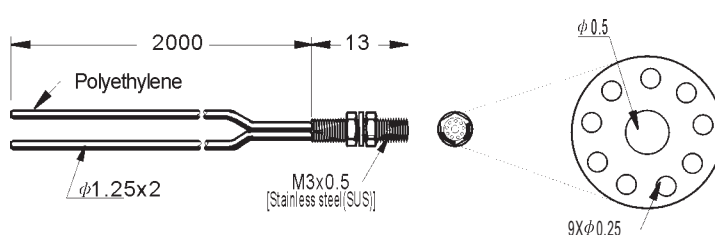


Model number	Length	Bundle	Sheath
PD-M4T442S	2000	9xφ0.25+0.5	Polyethylene

## Range (mm)

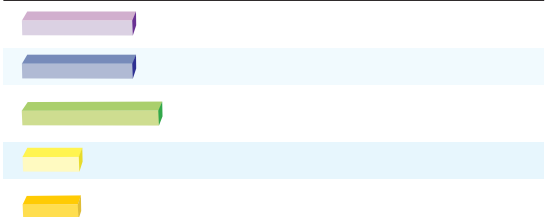


## Dimensions (mm)



Model number	Length	Bundle	Sheath
PD-M3T442S	2000	9xφ0.25+0.5	Polyethylene

## Range (mm)

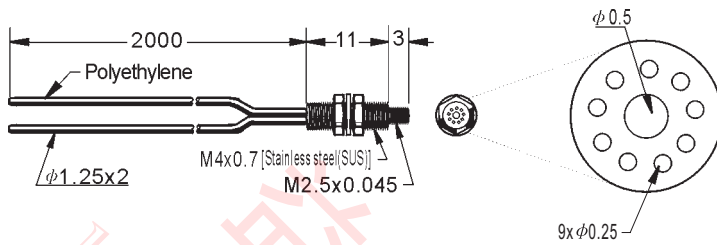


# Plastic Fibers

# Diffuse Mode Bifurcated Cables



## Dimensions (mm)

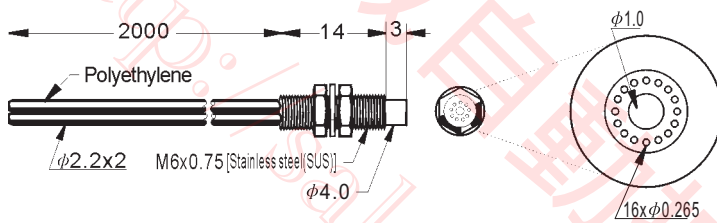


Model number	Length	Bundle	Sheath
PD-M4P442S-E	2000	9x $\phi$ 0.25	Polyethylene

## Range (mm)



## Dimensions (mm)

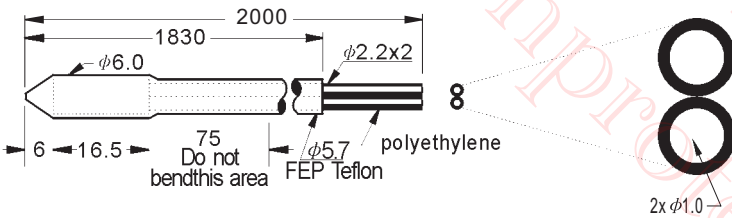


Model number	Length	Bundle	Sheath
PD-M6P432S-3	2000	16x $\phi$ 0.265	Polyethylene

## Range (mm)



## Dimensions (mm)

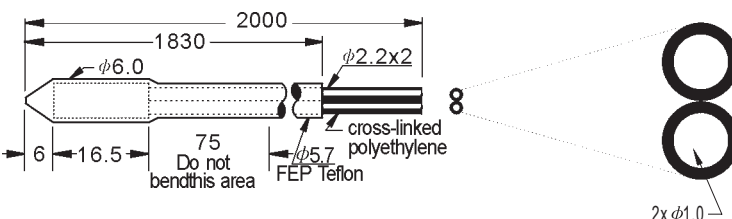


Model number	Length	Bundle	Sheath
PD-D6F2S	2000	2x $\phi$ 1.0	Polyethylene

## Range (mm)



## Dimensions (mm)

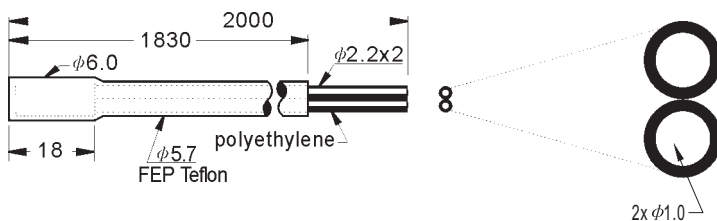


Model number	Length	Bundle	Sheath
PD-D6F2S-1	2000	2x $\phi$ 1.0	Polyethylene

## Range (mm)

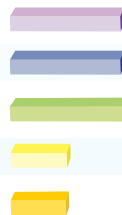


## Dimensions (mm)



Model number	Length	Bundle	Sheath
PD-D6F2S-2	2000	2x $\phi$ 1.0	Polyethylene

## Range (mm)

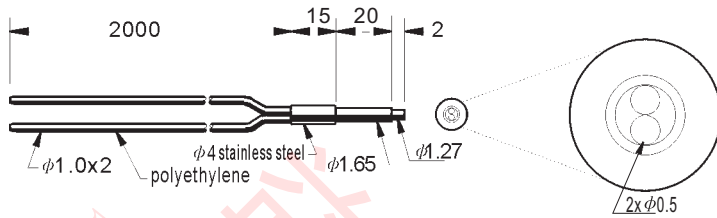


# Diffuse Mode Bifurcated Cables

# Plastic Fibers

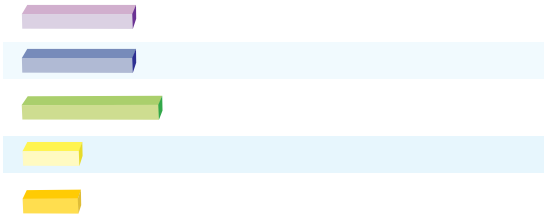


## Dimensions (mm)

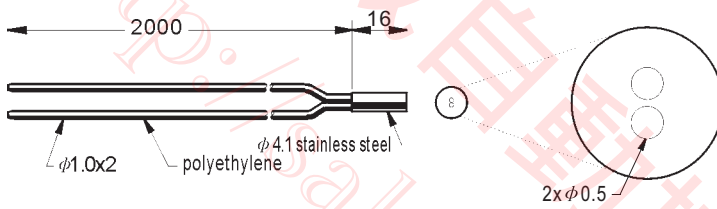


Model number	Length	Bundle	Sheath
PD-D1.65F152S-K	2000	2x $\phi$ 0.5	Polyethylene

## Range (mm)

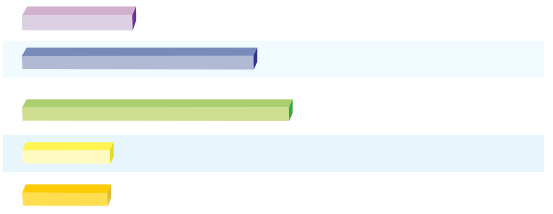


## Dimensions (mm)

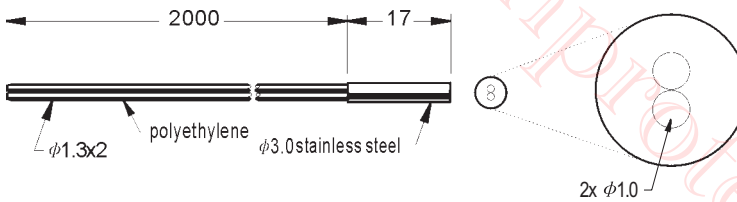


Model number	Length	Bundle	Sheath
PD-D4.1F152S	2000	2x $\phi$ 0.5	Polyethylene

## Range (mm)

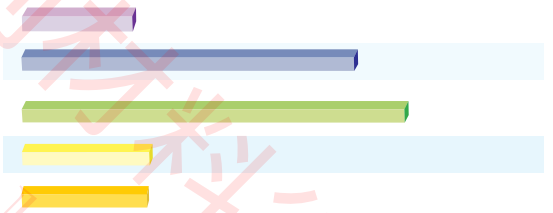


## Dimensions (mm)

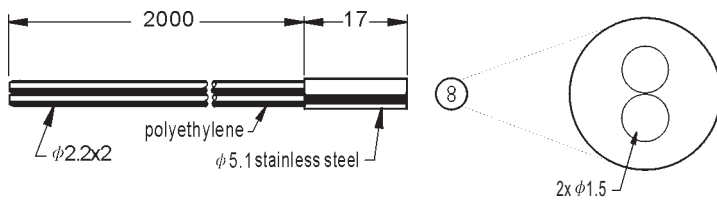


Model number	Length	Bundle	Sheath
PD-D3F142S	2000	2x $\phi$ 1.0	Polyethylene

## Range (mm)



## Dimensions (mm)

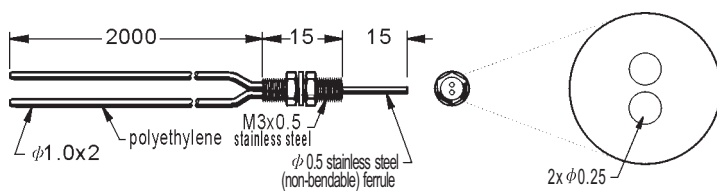


Model number	Length	Bundle	Sheath
PD-D5.1F172S	2000	2x $\phi$ 1.5	Polyethylene

## Range (mm)

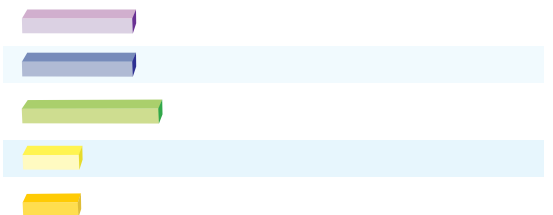


## Dimensions (mm)



Model number	Length	Bundle	Sheath
PD-M3P392S	2000	2x $\phi$ 0.25	Polyethylene

## Range (mm)

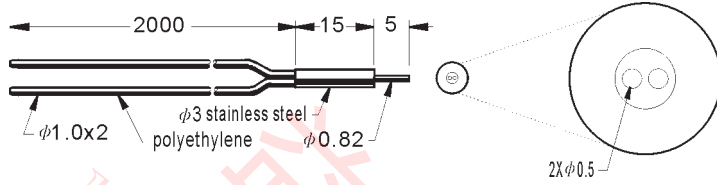


# Plastic Fibers

# Diffuse Mode Bifurcate Cables

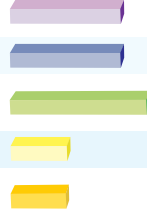


## Dimensions (mm)

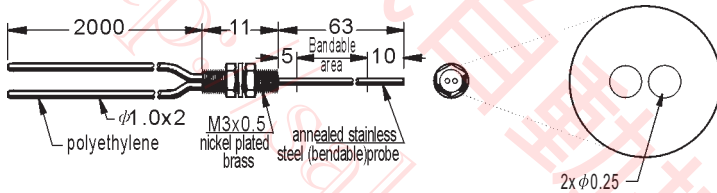


Model number	Length	Bundle	Sheath
PD-D3F152S	2000	2xφ0.05	Polyethylene

## Range (mm)

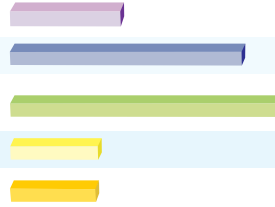


## Dimensions (mm)

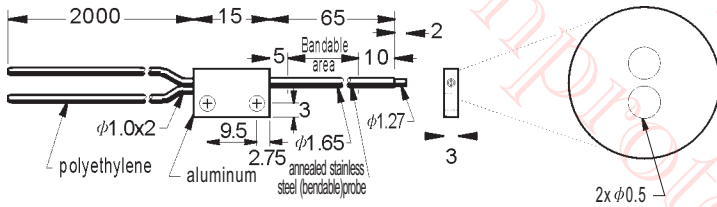


Model number	Length	Bundle	Sheath
PD-M3P392S-63	2000	2xφ0.25	Polyethylene

## Range (mm)

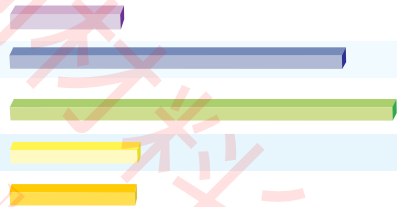


## Dimensions (mm)

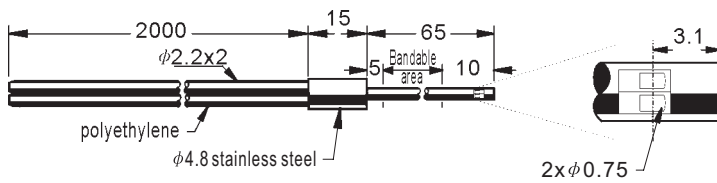


Model number	Length	Bundle	Sheath
PD-D1.65F152S	2000	2xφ0.5	Polyethylene

## Range (mm)

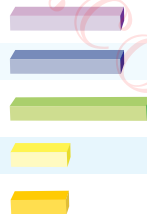


## Dimensions (mm)

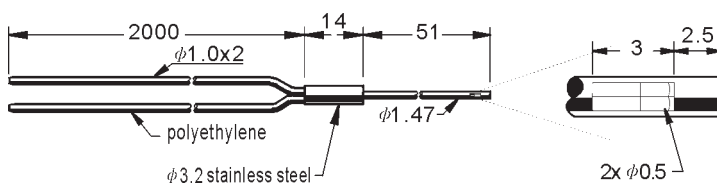


Model number	Length	Bundle	Sheath
PD-D4.8V562S	2000	2xφ0.75	Polyethylene

## Range (mm)

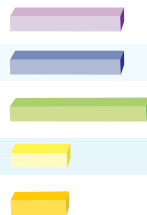


## Dimensions (mm)



Model number	Length	Bundle	Sheath
PD-D3.2V152S	2000	2xφ0.5	Polyethylene

## Range (mm)

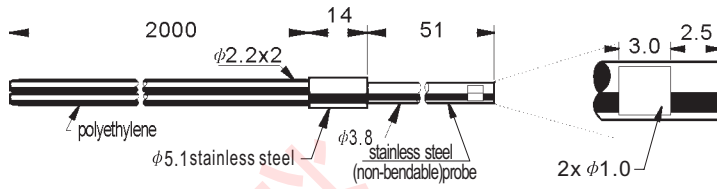


# Diffuse Mode Bifurcated Cables

## Plastic Fibers

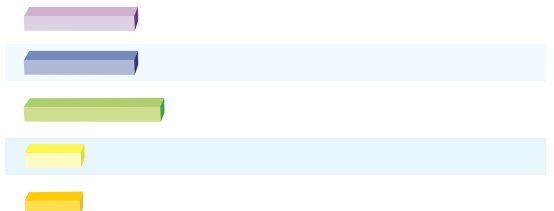


Dimensions (mm)

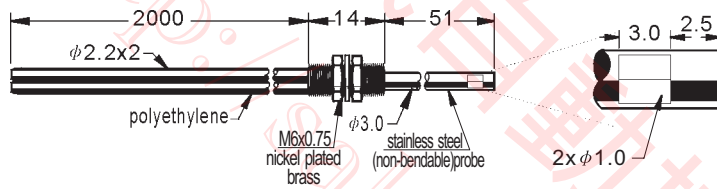


Model number	Length	Bundle	Sheath
PD-D5.1V142S	2000	2x $\phi$ 1.0	Polyethylene

Range (mm)

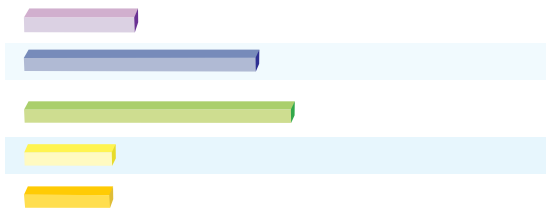


Dimensions (mm)

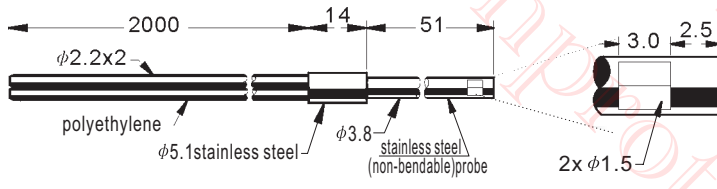


Model number	Length	Bundle	Sheath
PD-M6P142S-51	2000	2x $\phi$ 1.0	Polyethylene

Range (mm)

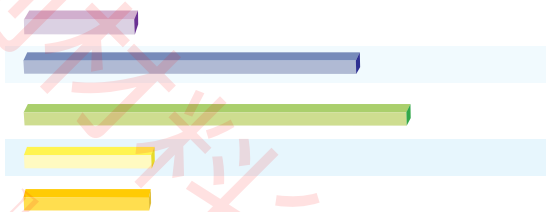


Dimensions (mm)

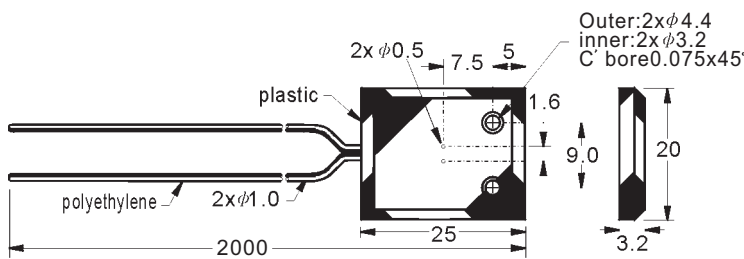


Model number	Length	Bundle	Sheath
PD-D5.1V172S	2000	2x $\phi$ 1.5	Polyethylene

Range (mm)



Dimensions (mm)

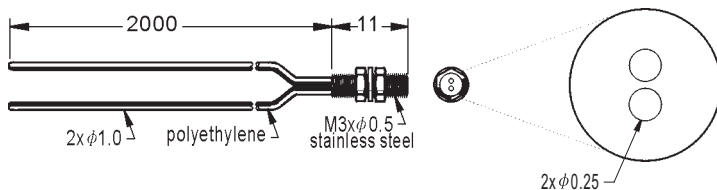


Model number	Length	Bundle	Sheath
PD-DH151S	2000	2x $\phi$ 0.5	Polyethylene

Range (mm)

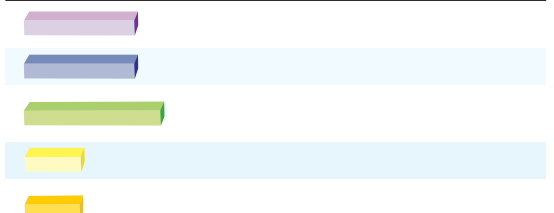


Dimensions (mm)



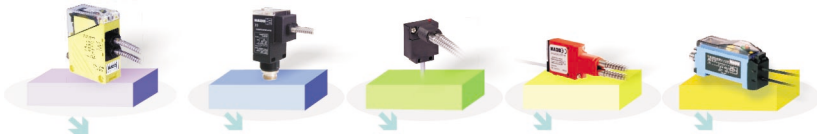
Model number	Length	Bundle	Sheath
PD-M3T392S	2000	2x $\phi$ 0.25	Polyethylene

Range (mm)

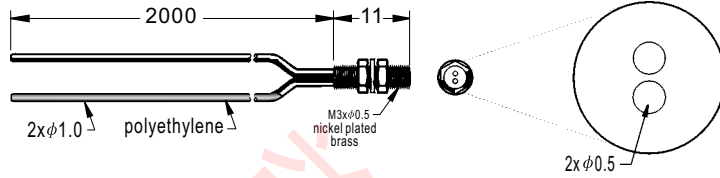


# Plastic Fibers

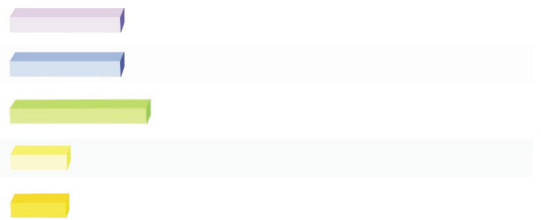
## Diffuse Mode Bifurcated Cables



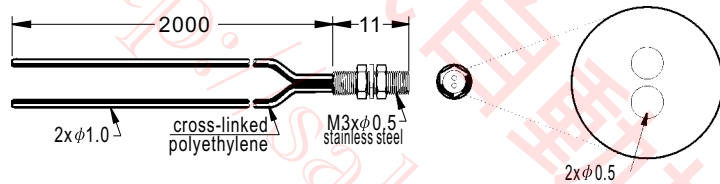
### Dimensions (mm)



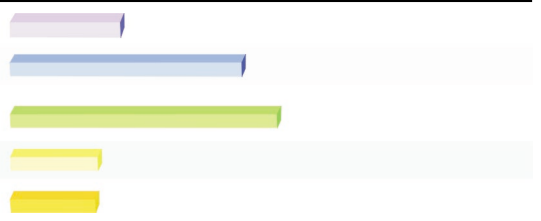
Model number	Length	Bundle	Sheath
PD-M3T152S	2000	2xφ0.5	Polyethylene
Range (mm)			



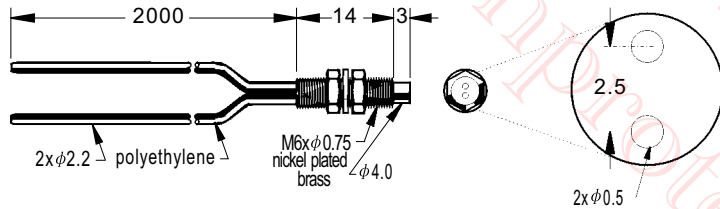
### Dimensions (mm)



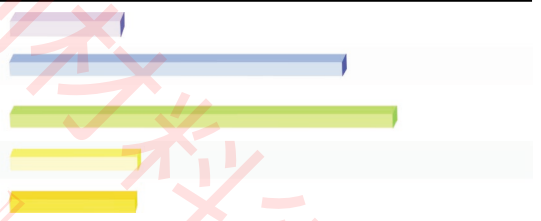
Model number	Length	Bundle	Sheath
PD-M3T152S-1	2000	2xφ0.5	Polyethylene
Range (mm)			



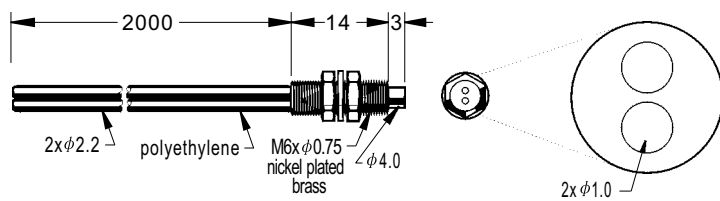
### Dimensions (mm)



Model number	Length	Bundle	Sheath
PD-M6P152S-3	2000	2xφ0.5	Polyethylene
Range (mm)			



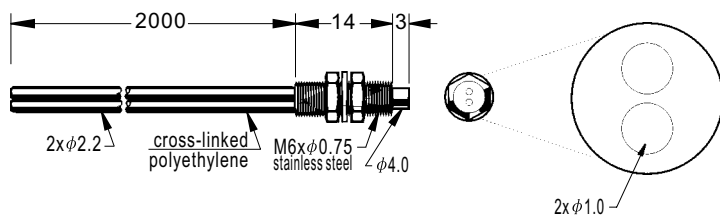
### Dimensions (mm)



Model number	Length	Bundle	Sheath
PD-M6P142S-3	2000	2xφ1.0	Polyethylene
Range (mm)			



### Dimensions (mm)



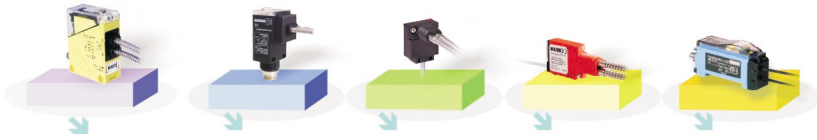
Model number	Length	Bundle	Sheath
PD-M6P142S-31	2000	2xφ1.0	Polyethylene
Range (mm)			



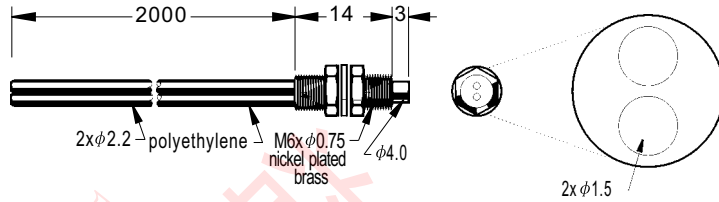
# Diffuse Mode

# Plastic Fibers

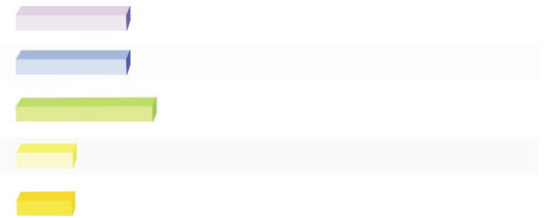
## Bifurcated Cables



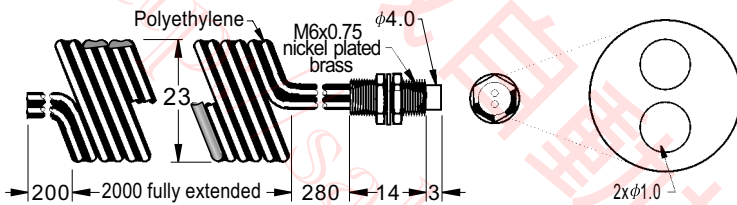
### Dimensions (mm)



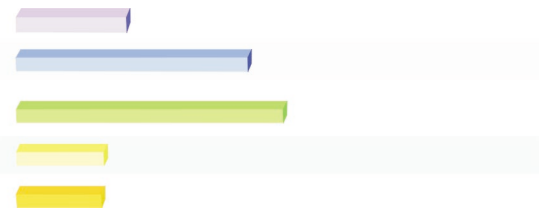
Model number	Length	Bundle	Sheath
PD-M6P172S-3	2000	2x $\phi$ 1.5	Polyethylene
Range (mm)			



### Dimensions (mm)

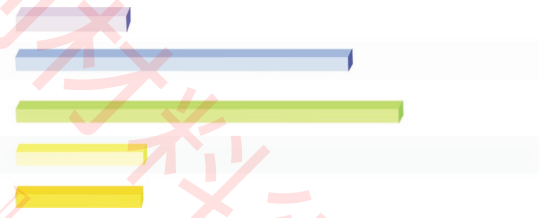


Model number	Length	Bundle	Sheath
PD-M6P142S-3c	2000	2x $\phi$ 1.0	Polyethylene
Range (mm)			



### Dimensions (mm)

Model number	Length	Bundle	Sheath
Range (mm)			



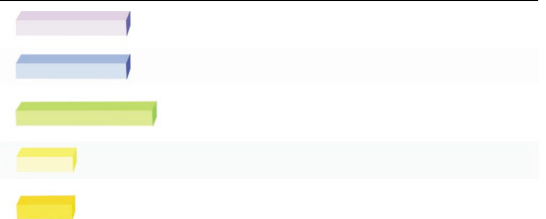
### Dimensions (mm)

Model number	Length	Bundle	Sheath
Range (mm)			



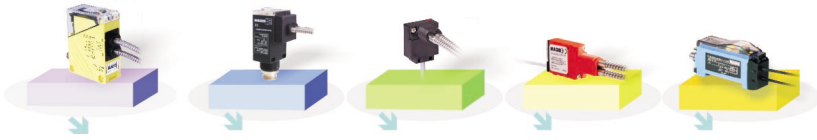
### Dimensions (mm)

Model number	Length	Bundle	Sheath
	2000		
Range (mm)			

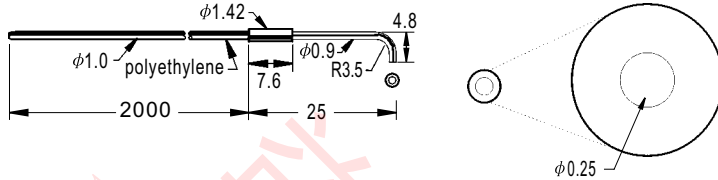


# Plastic Fibers

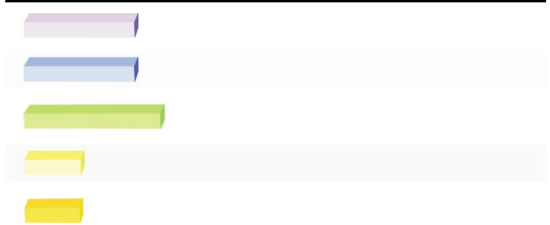
## Opposed Mode Individual Cables



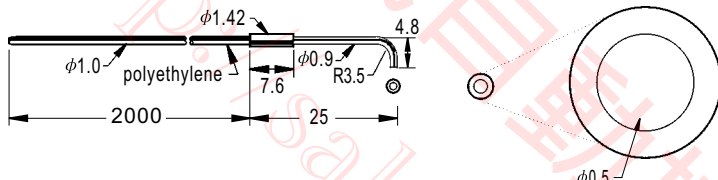
Dimensions (mm)



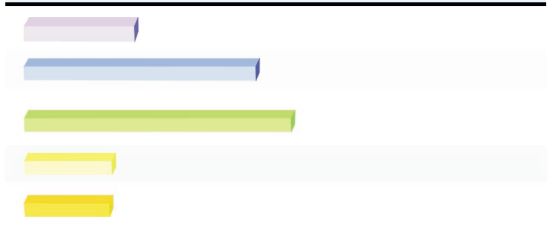
Model number	Length	Bundle	Sheath
PT-D0.9A062S	2000	φ0.25	Polyethylene
Range (mm)			



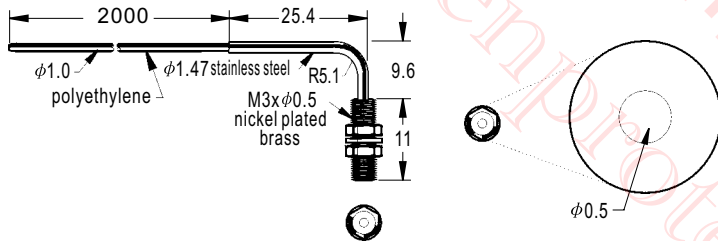
Dimensions (mm)



Model number	Length	Bundle	Sheath
PT-D0.9A042S	2000	φ0.5	Polyethylene
Range (mm)			



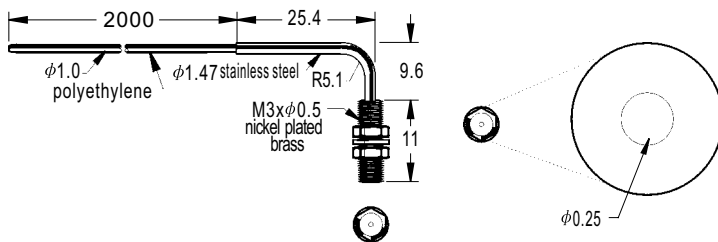
Dimensions (mm)



Model number	Length	Bundle	Sheath
PT-M3A042S	2000	φ0.5	Polyethylene
Range (mm)			



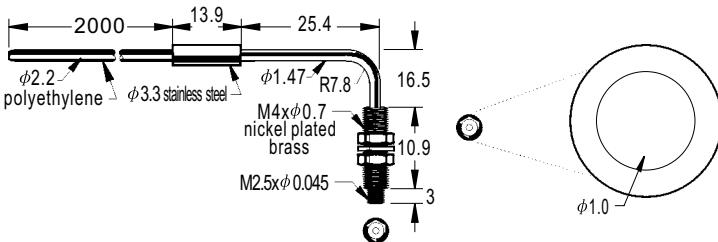
Dimensions (mm)



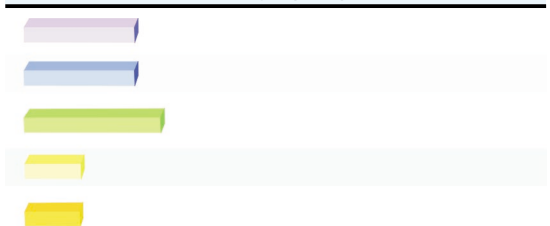
Model number	Length	Bundle	Sheath
PT-M3A062S	2000	φ0.25	Polyethylene
Range (mm)			



Dimensions (mm)



Model number	Length	Bundle	Sheath
PT-M2.5A012S-L	2000	φ1.0	Polyethylene
Range (mm)			

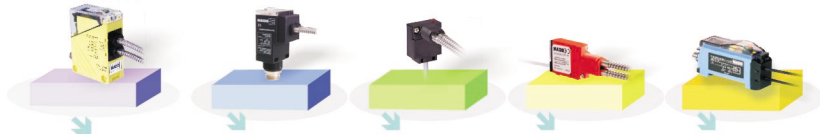




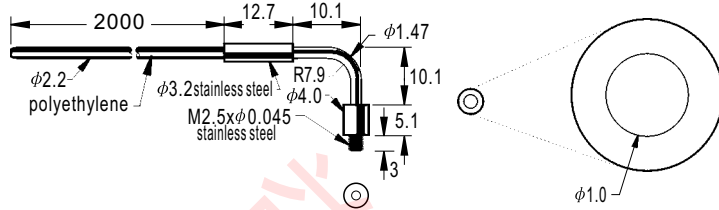
# Opposed Mode

# Plastic Fibers

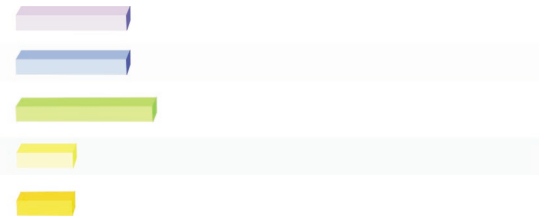
## Individual Cables



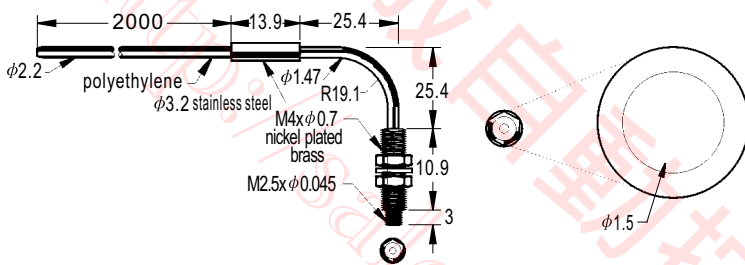
Dimensions (mm)



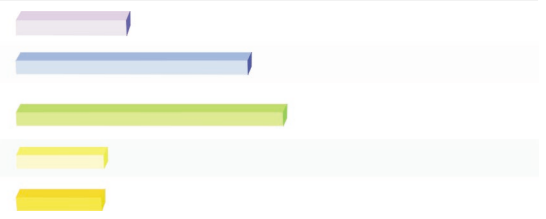
Model number	Length	Bundle	Sheath
PT-M2.5A012S	2000	φ1.0	Polyethylene
Range (mm)			



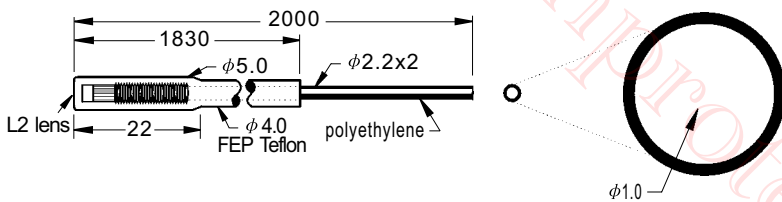
Dimensions (mm)



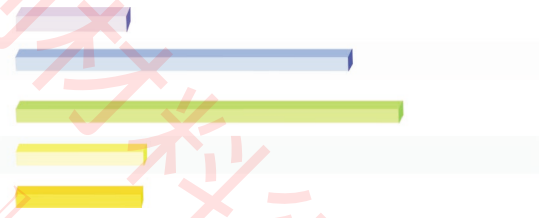
Model number	Length	Bundle	Sheath
PT-M2.5A052S-L	2000	φ1.5	Polyethylene
Range (mm)			



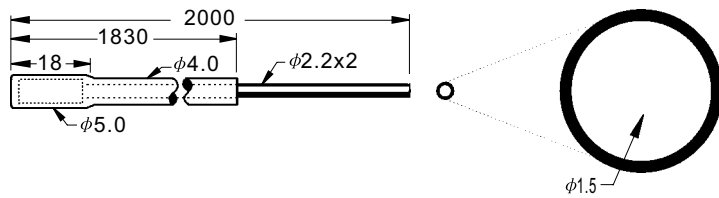
Dimensions (mm)



Model number	Length	Bundle	Sheath
PT-D5F492S	2000	L2 lens	Polyethylene
Range (mm)			



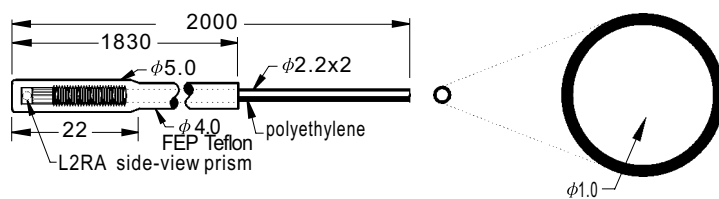
Dimensions (mm)



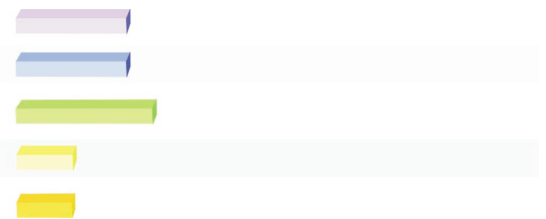
Model number	Length	Bundle	Sheath
PT-D5F2S-1	2000		Polyethylene
Range (mm)			



Dimensions (mm)

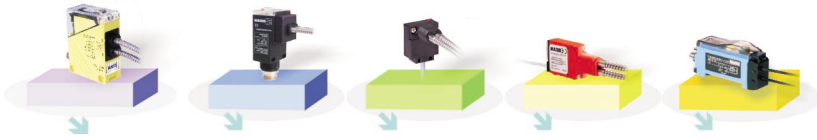


Model number	Length	Bundle	Sheath
PT-D5F502S	2000	L2RA	Polyethylene
Range (mm)			

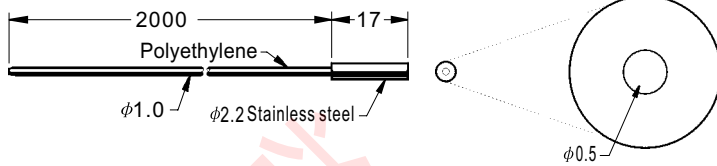


# Plastic Fibers

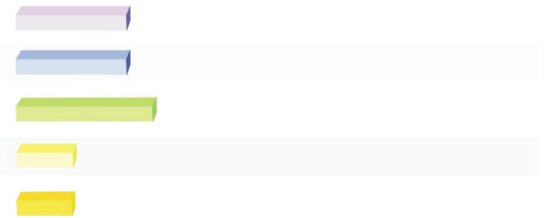
## Opposed Mode Individual Cables



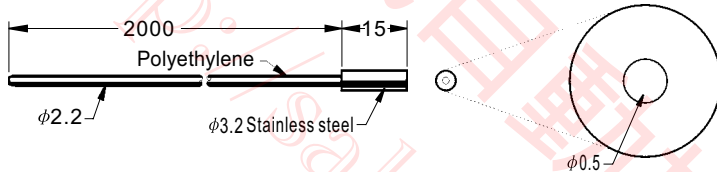
### Dimensions (mm)



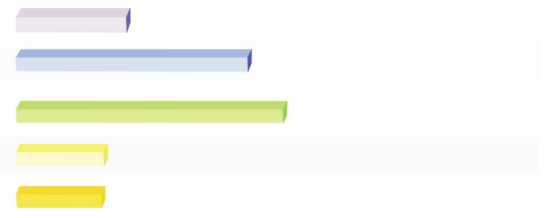
Model number	Length	Bundle	Sheath
PT-D2.2F042S	2000	φ 0.5	Polyethylene
Range (mm)			



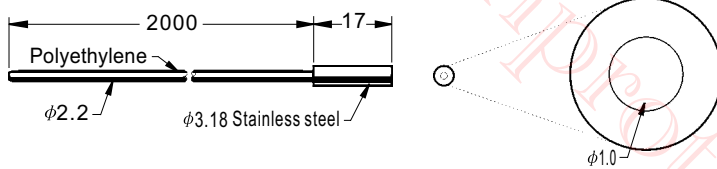
### Dimensions (mm)



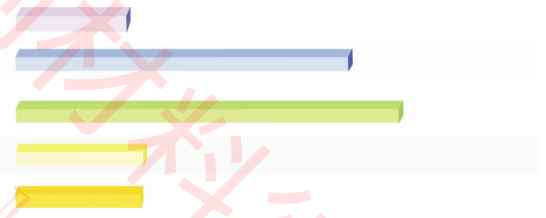
Model number	Length	Bundle	Sheath
PT-D3.2F042S	2000	φ 0.5	Polyethylene
Range (mm)			



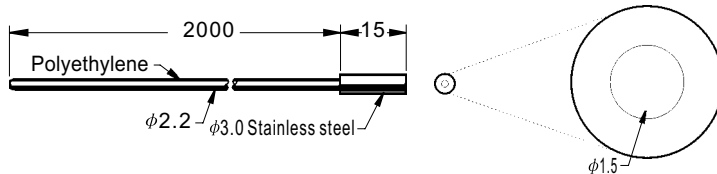
### Dimensions (mm)



Model number	Length	Bundle	Sheath
PT-D3.18F012S	2000	φ 1.0	Polyethylene
Range (mm)			



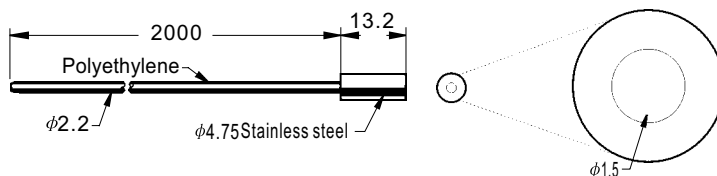
### Dimensions (mm)



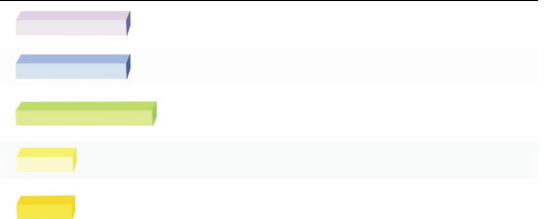
Model number	Length	Bundle	Sheath
PT-D3F052S	2000	φ 1.5	Polyethylene
Range (mm)			



### Dimensions (mm)

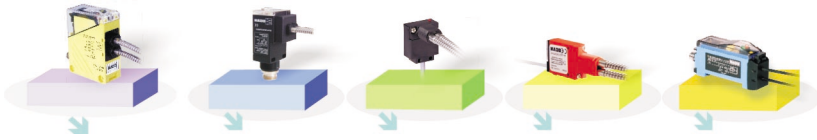


Model number	Length	Bundle	Sheath
PT-D4.75F052S	2000	φ 1.5	Polyethylene
Range (mm)			

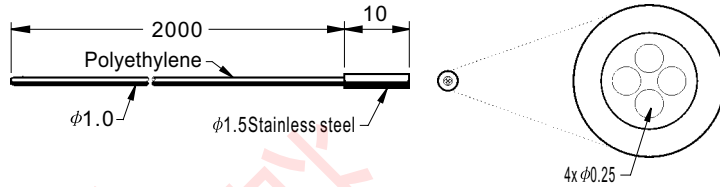


# Plastic Fibers

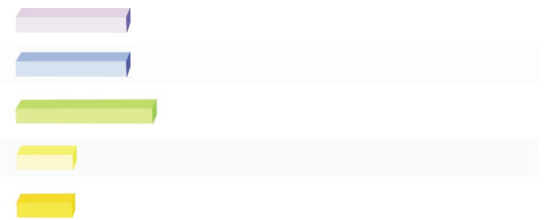
## Opposed Mode Individual Cables



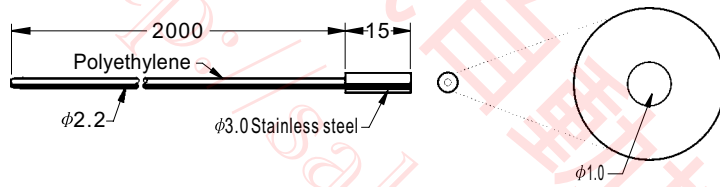
### Dimensions (mm)



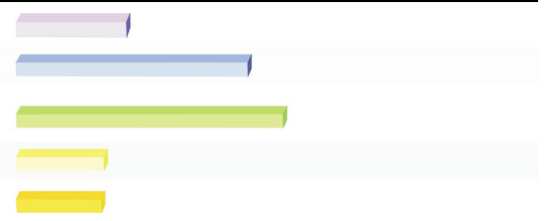
Model number	Length	Bundle	Sheath
PT-D1.5F202S	2000	4xφ0.25	Polyethylene
Range (mm)			



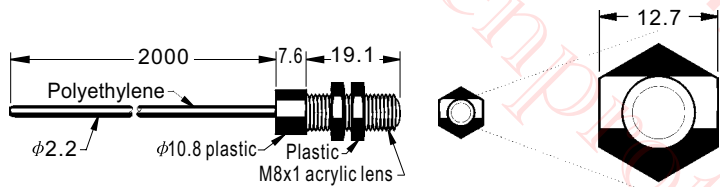
### Dimensions (mm)



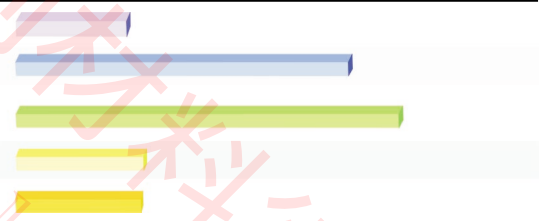
Model number	Length	Bundle	Sheath
PT-D3F012S	2000	φ1.0	Polyethylene
Range (mm)			



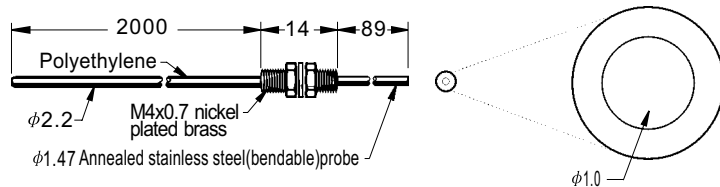
### Dimensions (mm)



Model number	Length	Bundle	Sheath
PT-M8T482S	2000	1 acrylic lens	Polyethylene
Range (mm)			



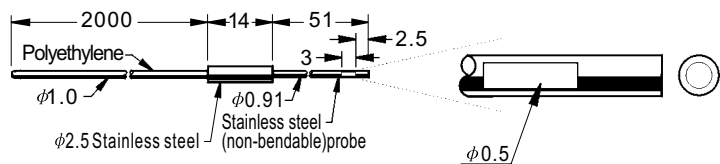
### Dimensions (mm)



Model number	Length	Bundle	Sheath
PT-M4P012S-89	2000	φ1.0	Polyethylene
Range (mm)			



### Dimensions (mm)

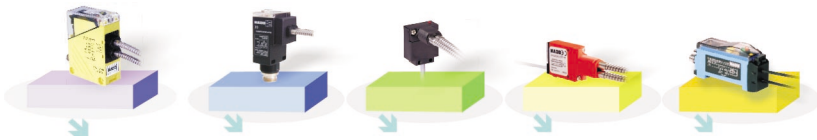


Model number	Length	Bundle	Sheath
PT-D2.5V042S	2000	φ0.5	Polyethylene
Range (mm)			

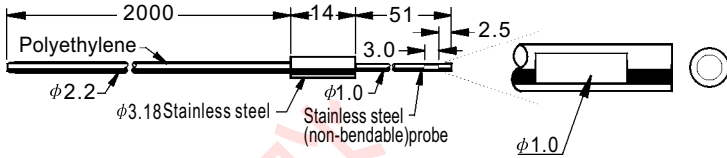


# Plastic Fibers

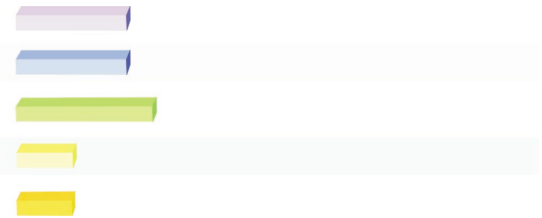
## Opposed Mode Individual Cables



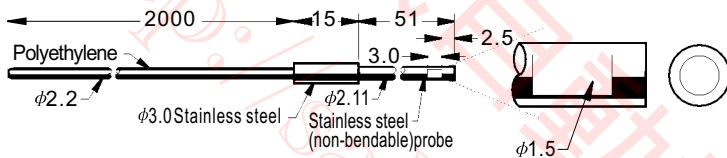
### Dimensions (mm)



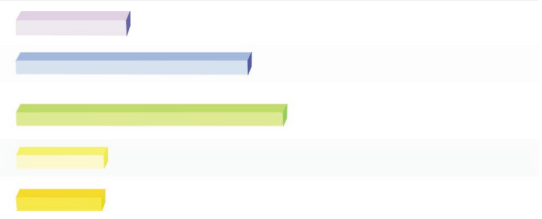
Model number	Length	Bundle	Sheath
PT-D3.18V012S	2000	φ1.0	Polyethylene
Range (mm)			



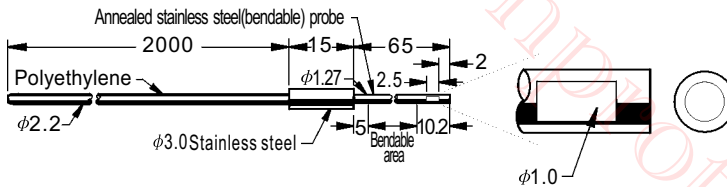
### Dimensions (mm)



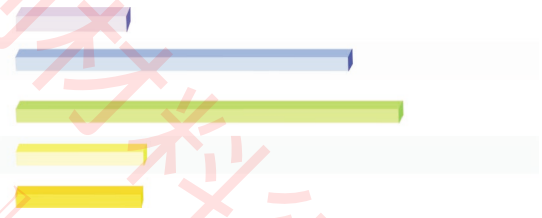
Model number	Length	Bundle	Sheath
PT-D3V052S	2000	φ1.5	Polyethylene
Range (mm)			



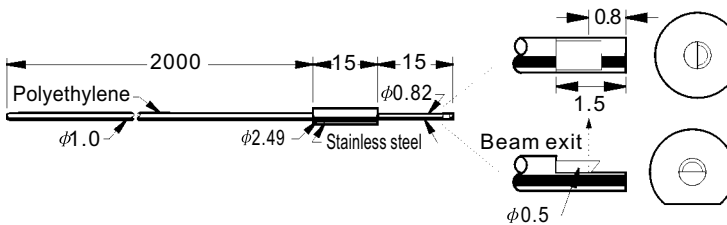
### Dimensions (mm)



Model number	Length	Bundle	Sheath
PT-D3V012S	2000	φ1.0	Polyethylene
Range (mm)			



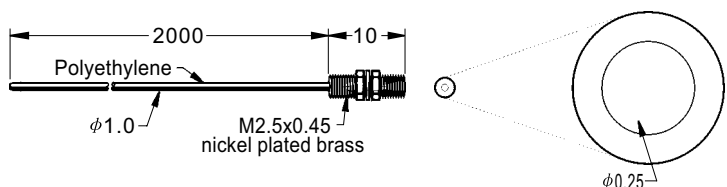
### Dimensions (mm)



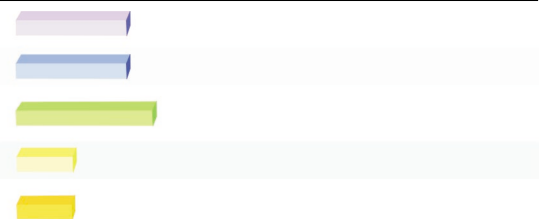
Model number	Length	Bundle	Sheath
PT-D2.49V042S	2000	φ0.5	Polyethylene
Range (mm)			



### Dimensions (mm)



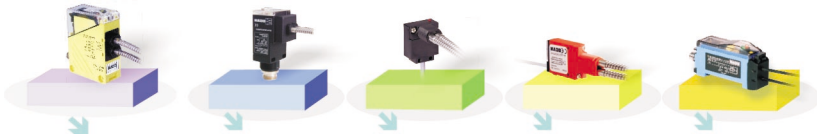
Model number	Length	Bundle	Sheath
PT-M2.5P062S	2000	φ0.25	Polyethylene
Range (mm)			



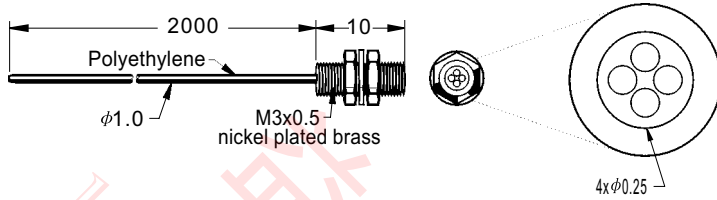
# Plastic Fibers

## Opposed Mode

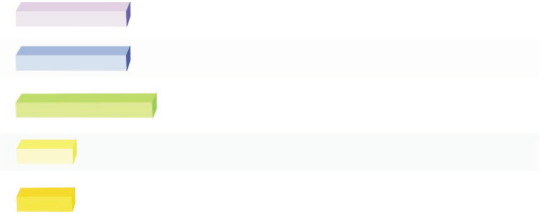
### Individual Cables



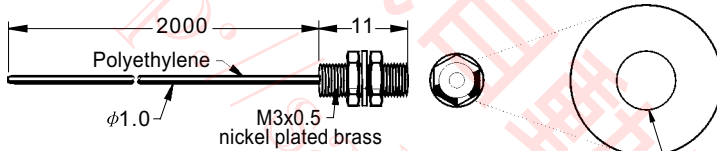
#### Dimensions (mm)



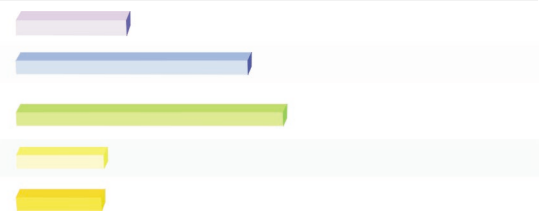
Model number	Length	Bundle	Sheath
PT-M3T202S	2000	4xφ0.25	Polyethylene
Range (mm)			



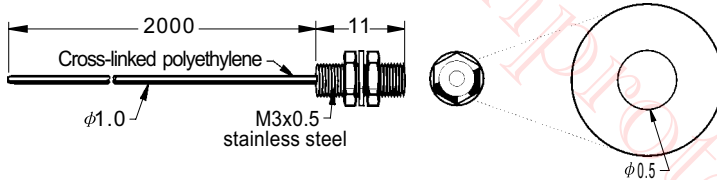
#### Dimensions (mm)



Model number	Length	Bundle	Sheath
PT-M3T042S	2000	φ0.5	Polyethylene
Range (mm)			



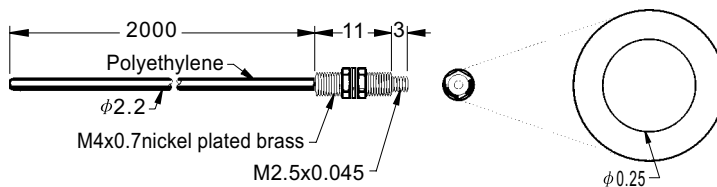
#### Dimensions (mm)



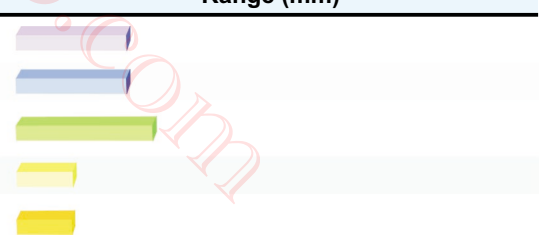
Model number	Length	Bundle	Sheath
PT-M3T042S-1	2000	φ0.5	Polyethylene
Range (mm)			



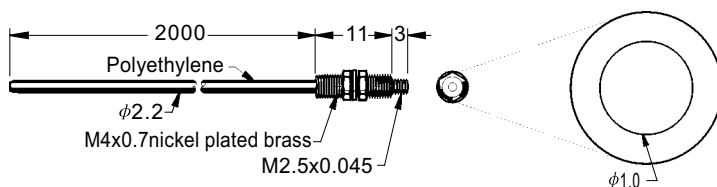
#### Dimensions (mm)



Model number	Length	Bundle	Sheath
PT-M4P062S-E	2000	φ0.25	Polyethylene
Range (mm)			



#### Dimensions (mm)

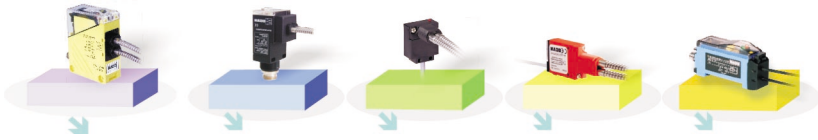


Model number	Length	Bundle	Sheath
PT-M4P012S-E	2000	φ1.0	Polyethylene
Range (mm)			

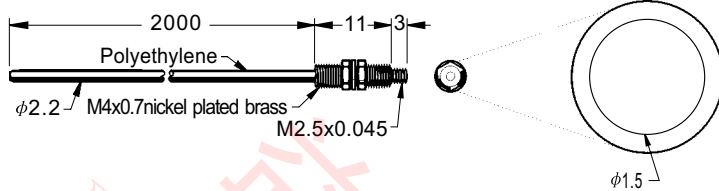


# Plastic Fibers

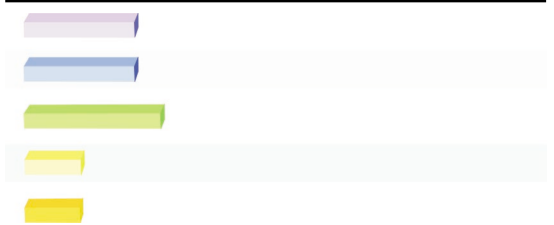
## Opposed Mode Individual Cables



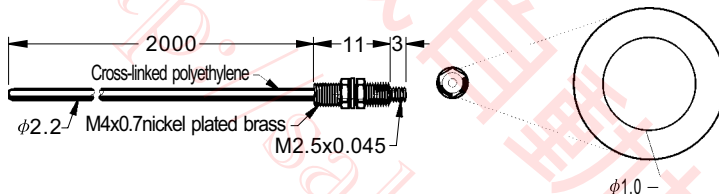
Dimensions (mm)



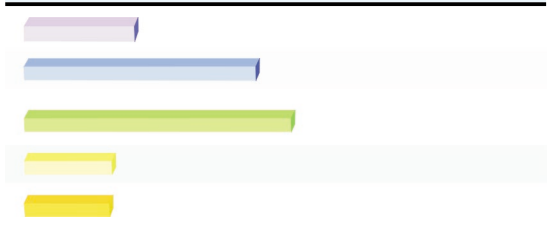
Model number	Length	Bundle	Sheath
PT-M4P052S	2000	φ 1.5	Polyethylene
Range (mm)			



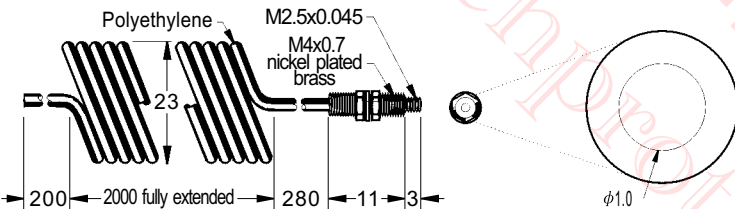
Dimensions (mm)



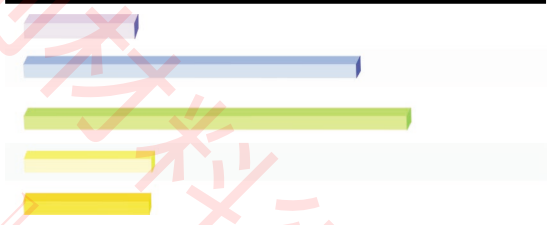
Model number	Length	Bundle	Sheath
PT-M4P012S	2000	φ 1.0	Polyethylene
Range (mm)			



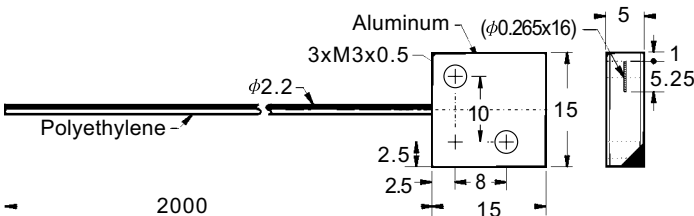
Dimensions (mm)



Model number	Length	Bundle	Sheath
PT-M2.5P012S	2000	φ 1.0	Polyethylene
Range (mm)			



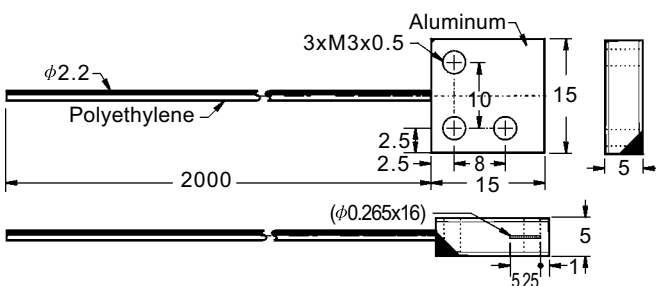
Dimensions (mm)



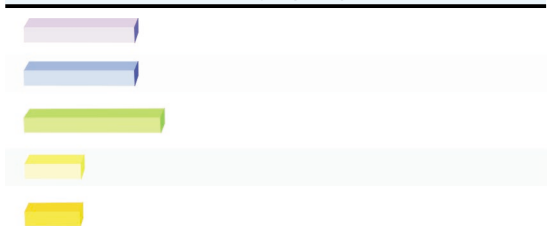
Model number	Length	Bundle	Sheath
PT-DC642S	2000	16 x φ 0.265	Polyethylene
Range (mm)			



Dimensions (mm)

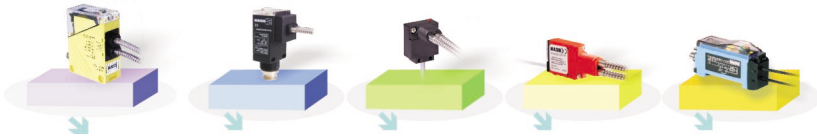


Model number	Length	Bundle	Sheath
PT-DB642S	2000	16 x φ 0.265	Polyethylene
Range (mm)			

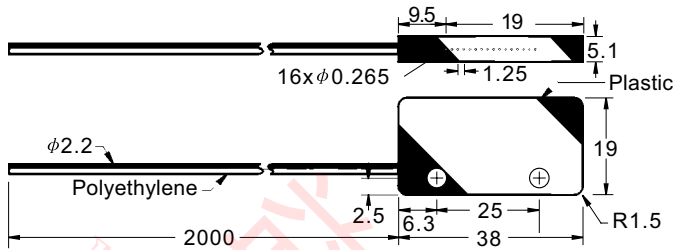


# Opposed Mode Individual Cables

# Plastic Fibers

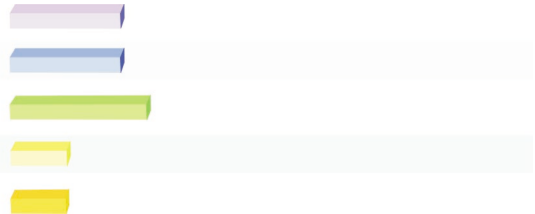


### Dimensions (mm)

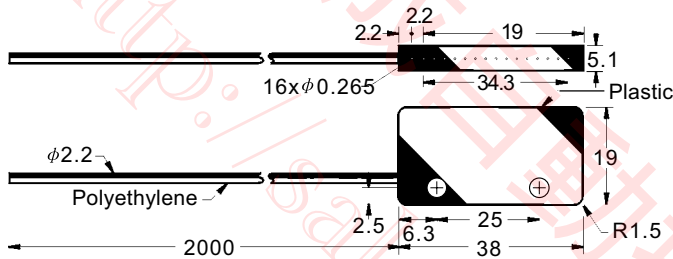


Model number	Length	Bundle	Sheath
PT-DX192S	2000	16x $\phi$ 0.265	Polyethylene

### Range (mm)

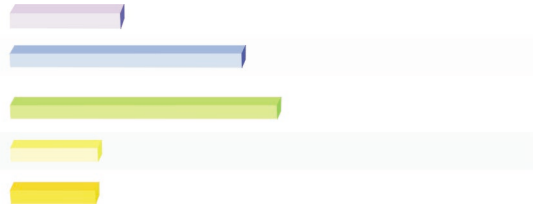


### Dimensions (mm)

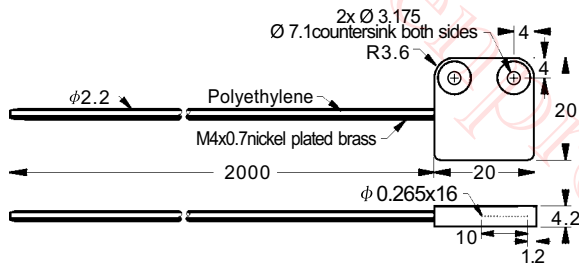


Model number	Length	Bundle	Sheath
PT-DX192S-1	2000	16x $\phi$ 0.265	Polyethylene

### Range (mm)

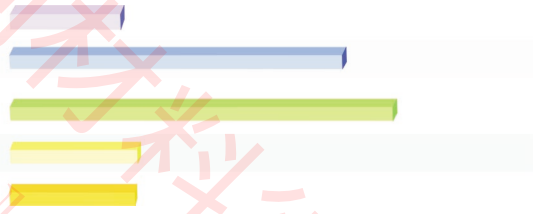


### Dimensions (mm)



Model number	Length	Bundle	Sheath
PT-DX522S	2000	16x $\phi$ 0.265	Polyethylene

### Range (mm)



### Dimensions (mm)

Model number	Length	Bundle	Sheath

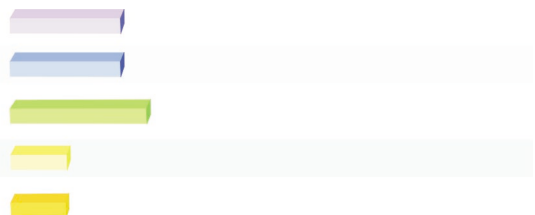
### Range (mm)



### Dimensions (mm)

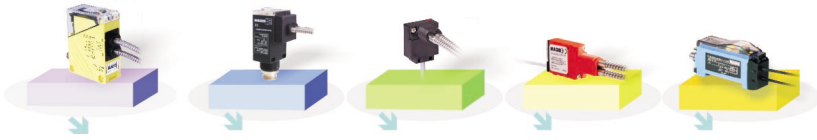
Model number	Length	Bundle	Sheath

### Range (mm)

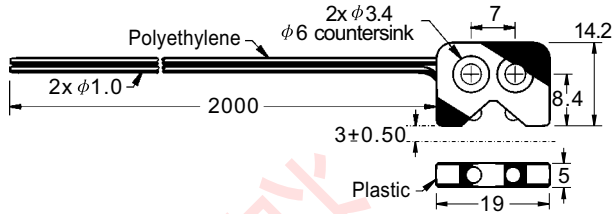


# Specialty Fibers

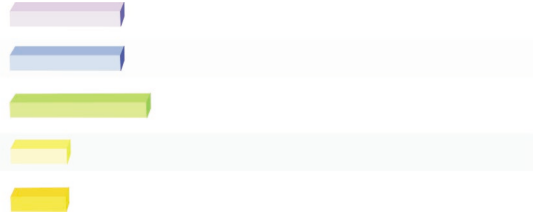
## Opposed Mode Individual Cables



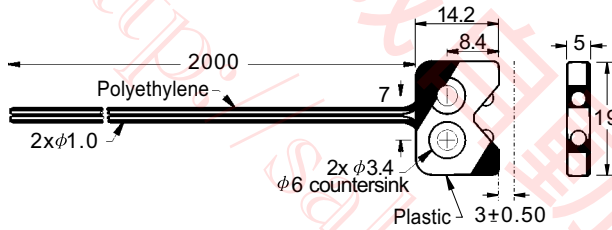
Dimensions (mm)



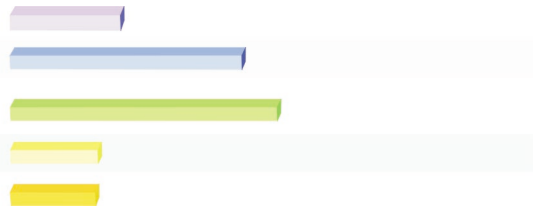
Model number	Length	Bundle	Sheath
PD-DJ542S	2000		Polyethylene
Range (mm)			



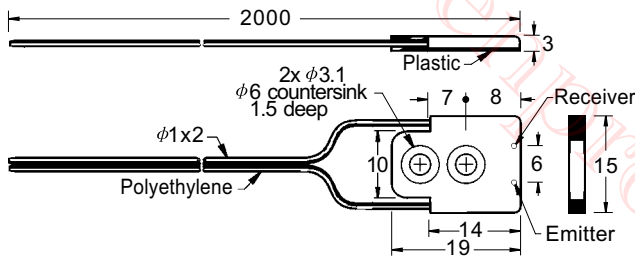
Dimensions (mm)



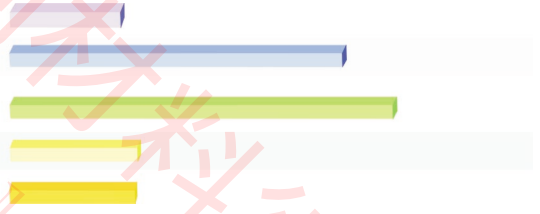
Model number	Length	Bundle	Sheath
PD-DK542S	2000		Polyethylene
Range (mm)			



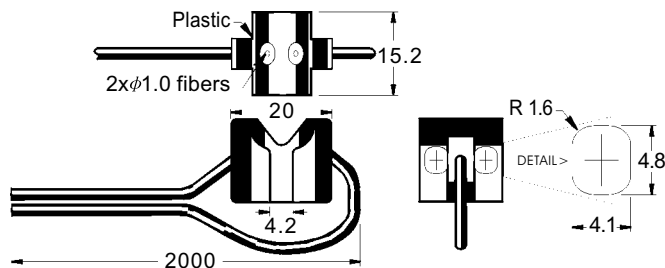
Dimensions (mm)



Model number	Length	Bundle	Sheath
PD-DE702S	2000		Polyethylene
Range (mm)			



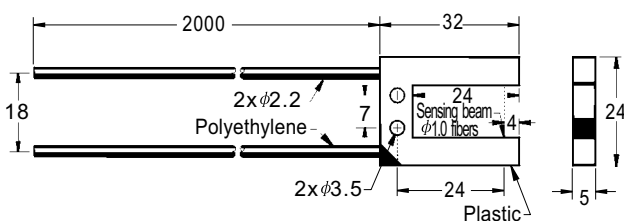
Dimensions (mm)



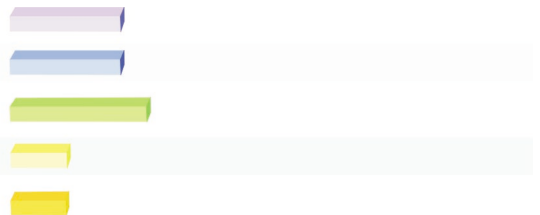
Model number	Length	Bundle	Sheath
PT-DCO142S	2000	2xφ1.0	Polyethylene
Range (mm)			



Dimensions (mm)



Model number	Length	Bundle	Sheath
PT-DS012S	2000	2xφ1.0	Polyethylene
Range (mm)			

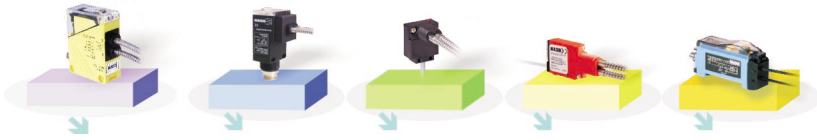




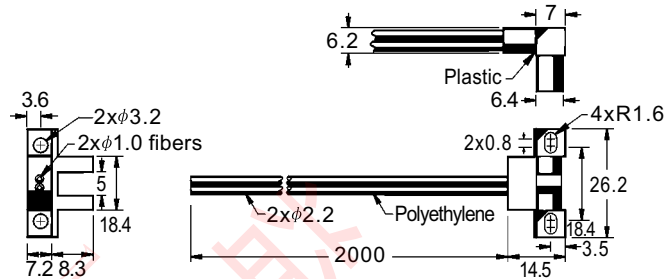
# Specialty Fibers

## Opposed Mode

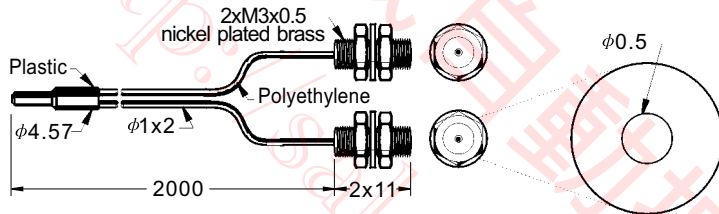
### Individual Cables



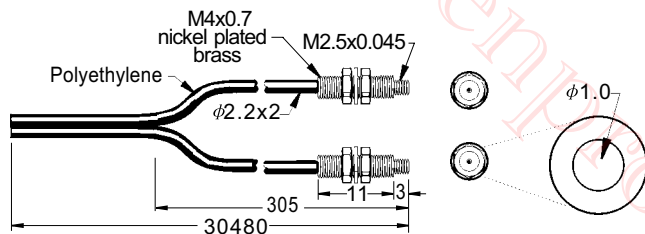
Dimensions (mm)



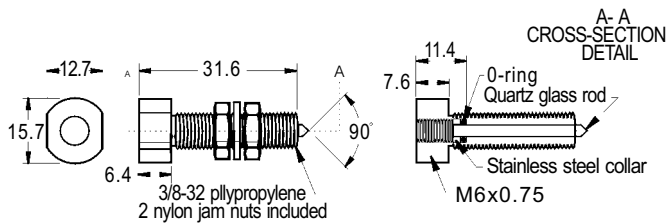
Dimensions (mm)



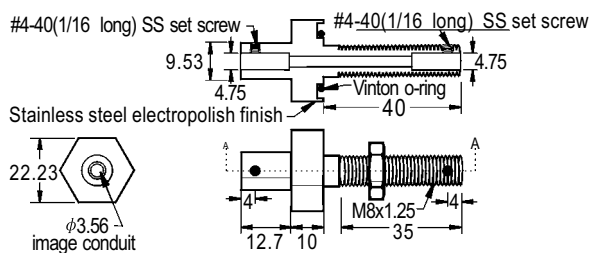
Dimensions (mm)



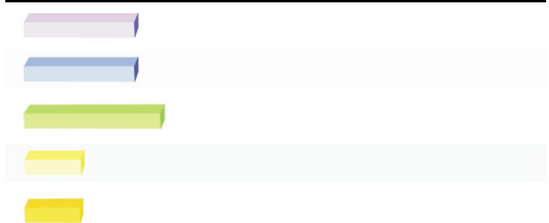
Dimensions (mm)



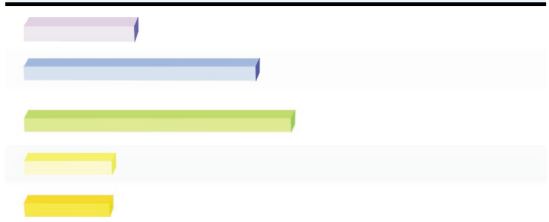
Dimensions (mm)



Model number	Length	Bundle	Sheath
PD-DQ582S	2000		Polyethylene
Range (mm)			



Model number	Length	Bundle	Sheath
PT-M3T042S	2000	φ0.5	Polyethylene
Range (mm)			



Model number	Length	Bundle	Sheath
PT-M4P012S-E	2000	φ1.0	Polyethylene
Range (mm)			



Model number	Length	Bundle	Sheath
PT-M3/8T	2000		
Range (mm)			



Model number	Length	Bundle	Sheath
PT-M8P	2000		
Range (mm)			

