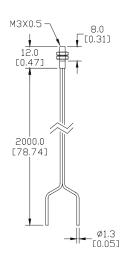
## OPT2050 Diffuse (Reflex) Mode

<b>Specifications</b>	
Optical Fiber Core Ø	0.5 mm
Sensing Distance with OPT series	60mm
Fiber Length (L)	2m
Fiber Bending Radius	15mm
Free Cut	Yes
Head Size	M3
Thread Pitch	0.5
Temperature Range	-40 to 85°C [-40 to 185°F]
Fiber Materials	PMMA
Sleeve Materials	PE (black)
Head Materials	Stainless steel
Fiber Distribution	Parallel arrangement
Opening Angle	55 degrees
Diameter Jacket	1mm
Light Emission	Straight



#### **Dimensions**

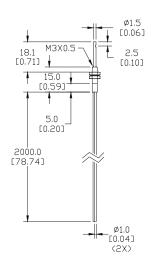
mm [inch]



## OPT2051 Diffuse (Reflex) Mode

<b>Specifications</b>	
Optical Fiber Core Ø	0.5 mm
Sensing Distance with OPT series	12mm
Fiber Length (L)	2m
Fiber Bending Radius	15mm
Free Cut	Yes
Head Size	M3
Thread Pitch	0.5
Temperature Range	-40 to 85°C [-40 to 185°F]
Fiber Materials	PMMA
Sleeve Materials	PE (black)
Head Materials	Stainless steel
Fiber Distribution	Parallel arrangement
Opening Angle	55 degrees
Diameter Jacket	1mm
Light Emission	Sidewise





**tSEN-323** Photoelectric Sensors 1 - 8 0 0 - 6 3 3 - 0 4 0 5

# **Cuttable Fiber Optic Cable**

#### OPT2052 Diffuse (Reflex) Mode

<b>Specifications</b>	
Optical Fiber Core Ø	0.5 mm
Sensing Distance with OPT series	60mm
Fiber Length (L)	2m
Fiber Bending Radius	15mm
Free Cut	Yes
Head Size	3mm
Thread Pitch	NA
Temperature Range	-40 to 85°C [-40 to 185°F]
Fiber Materials	PMMA
Sleeve Materials	PE (black)
Head Materials	Stainless steel
Fiber Distribution	Coaxial arrangement
Opening Angle	55 degrees
Diameter Jacket	1.3 mm
Light Emission	Straight



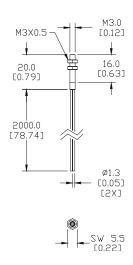
# mm [inch] 93.0 [0.12] 20.0 [0.79] 94.0 [0.16] 2000.0 [78.74] 91.3 [0.05]

(2X)

## OPT2053 Diffuse (Reflex) Mode

<b>Specifications</b>	
Optical Fiber Core Ø	0.5 mm
Sensing Distance with OPT series	60mm
Fiber Length (L)	2m
Fiber Bending Radius	15mm
Free Cut	Yes
Head Size	M3
Thread Pitch	0.5
Temperature Range	-40 to 85°C [-40 to 185°F]
Fiber Materials	PMMA
Sleeve Materials	PE (black)
Head Materials	Stainless steel
Fiber Distribution	Coaxial Arrangement
Opening Angle	55 degrees
Diameter Jacket	1.3 mm
Light Emission	Straight





**tSEN-324** Photoelectric Sensors 1 - 8 0 0 - 6 3 3 - 0 4 0 5

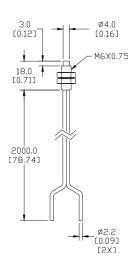
#### **Dimensions**

mm [inch]

#### OPT2054 Diffuse (Reflex) Mode

<b>Specifications</b>	
Optical Fiber Core Ø	1mm
Sensing Distance with OPT series	160mm
Fiber Length (L)	2m
Fiber Bending Radius	30mm
Free Cut	Yes
Head Size	M6
Thread Pitch	0.75
Temperature Range	-40 to 85°C [-40 to 185°F]
Fiber Materials	PMMA
Sleeve Materials	PE (black)
Head Materials	Nickel-plated brass
Fiber Distribution	Parallel arrangement
Opening Angle	55 degrees
Diameter Jacket	2.2 mm
Light Emission	Straight

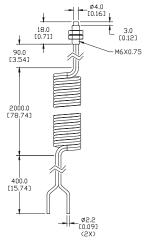




#### OPT2055 Diffuse (Reflex) Mode

<b>Specifications</b>	
Optical Fiber Core Ø	1mm
Sensing Distance with OPT series	60mm
Fiber Length (L)	2m
Fiber Bending Radius	30mm
Free Cut	Yes
Head Size	M6
Thread Pitch	0.75
Temperature Range	-40 to 85°C [-40 to 185°F]
Fiber Materials	PMMA
Sleeve Materials	PE (black)
Head Materials	Nickel-plated brass
Fiber Distribution	Parallel arrangement
Opening Angle	55 degrees
Diameter Jacket	2.2 mm
Light Emission	Straight





\* 2000.0 mm maximum extended coil length.

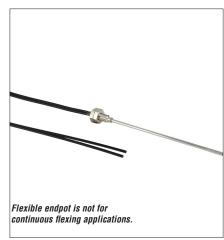
**tSEN-325** Photoelectric Sensors 1 - 8 0 0 - 6 3 3 - 0 4 0 5

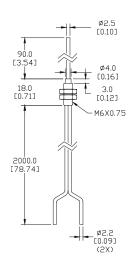
#### **Dimensions**

mm [inch]

#### OPT2056 Diffuse (Reflex) Mode

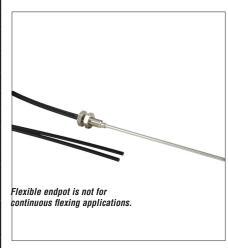
<b>Specifications</b>	
Optical Fiber Core Ø	1mm
Sensing Distance with OPT series	160mm
Fiber Length (L)	2m
Fiber Bending Radius	30mm
Free Cut	Yes
Head Size	M6
Thread Pitch	0.75
Temperature Range	-40 to 85°C [-40 to 185°F]
Fiber Materials	PMMA
Sleeve Materials	PE (black)
Head Materials	Stainless steel
Fiber Distribution	Parallel arrangement
Opening Angle	55 degrees
Diameter Jacket	2.2 mm
Light Emission	Straight
Flexible Endpot	Yes

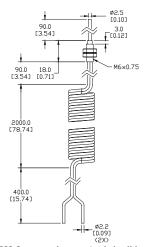




#### OPT2057 Diffuse (Reflex) Mode

<b>Specifications</b>	
Optical Fiber Core Ø	1mm
Sensing Distance with OPT series	60mm
Fiber Length (L)	2m
Fiber Bending Radius	30mm
Free Cut	Yes
Head Size	M6
Thread Pitch	0.75
Temperature Range	-40 to 85°C [-40 to 185°F]
Fiber Materials	PMMA
Sleeve Materials	PE (black)
Head Materials	Stainless steel
Fiber Distribution	Parallel arrangement
Opening Angle	55 degrees
Diameter Jacket	2.2 mm
Light Emission	Straight
Flexible Endpot	Yes





\* 2000.0 mm maximum extended coil length.

**tSEN-326** Photoelectric Sensors 1 - 8 0 0 - 6 3 3 - 0 4 0 5

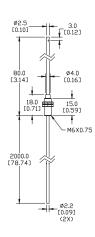
#### OPT2058 Diffuse (Reflex) Mode

<b>Specifications</b>	
Optical Fiber Core Ø	1mm
Sensing Distance with OPT series	60mm
Fiber Length (L)	2m
Fiber Bending Radius	30mm
Free Cut	Yes
Head Size	M6
Thread Pitch	0.75
Temperature Range	-40 to 85°C [-40 to 185°F]
Fiber Materials	PMMA
Sleeve Materials	PE (black)
Head Materials	Stainless steel
Fiber Distribution	Parallel arrangement
Opening Angle	55 degrees
Diameter Jacket	2.2 mm
Light Emission	Sidewise



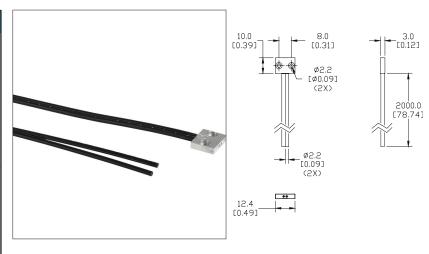
#### **Dimensions**

mm [inch]



#### OPT2059 Diffuse (Reflex) Mode

<b>Specifications</b>	
Optical Fiber Core Ø	1mm
Sensing Distance with OPT series	160mm
Fiber Length (L)	2m
Fiber Bending Radius	20mm
Free Cut	Yes
Head Size	12mm flat
Thread Pitch	NA
Temperature Range	-40 to 85°C [-40 to 185°F]
Fiber Materials	PMMA
Sleeve Materials	PE (black)
Head Materials	Aluminum
Fiber Distribution	Parallel arrangement
Opening Angle	55 degrees
Diameter Jacket	2.2 mm
Light Emission	Straight



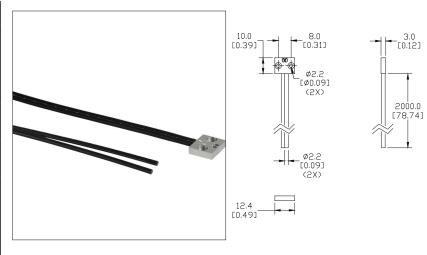
**tSEN-327** Photoelectric Sensors 1 - 8 0 0 - 6 3 3 - 0 4 0 5

mm [inch]

# **Cuttable Fiber Optic Cable**

## OPT2060 Diffuse (Reflex) Mode

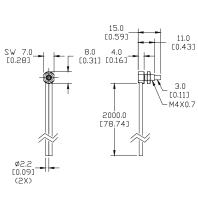
<b>Specifications</b>	
Optical Fiber Core Ø	1mm
Sensing Distance with OPT series	50mm
Fiber Length (L)	2m
Fiber Bending Radius	20mm
Free Cut	Yes
Head Size	12mm flat
Thread Pitch	NA
Temperature Range	-40 to 85°C [-40 to 185°F]
Fiber Materials	PMMA
Sleeve Materials	PE (black)
Head Materials	Aluminum
Fiber Distribution	Parallel arrangement
Opening Angle	55 degrees
Diameter Jacket	2.2 mm
Light Emission	Sidewise



## OPT2061 Diffuse (Reflex) Mode

<b>Specifications</b>	
Optical Fiber Core Ø	1mm
Sensing Distance with OPT series	70mm
Fiber Length (L)	2m
Fiber Bending Radius	50mm
Free Cut	Yes
Head Size	M4
Thread Pitch	0.7
Temperature Range	-40 to 85°C [-40 to 185°F]
Fiber Materials	PMMA
Sleeve Materials	PE (black)
Head Materials	Stainless steel
Fiber Distribution	Parallel arrangement
Opening Angle	55 degrees
Diameter Jacket	2.2 mm
Light Emission	Sidewise





tSEN-328 **Photoelectric Sensors** 1 - 8 0 0 - 6 3 3 - 0 4 0 5

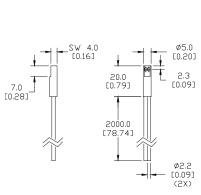
mm [inch]

## **Cuttable Fiber Optic Cable**

#### OPT2062 Diffuse (Reflex) Mode

#### **Specifications** Optical Fiber Core Ø 1mm Sensing Distance with OPT series 50mm Fiber Length (L) 2m Fiber Bending Radius 20mm Free Cut Yes Head Size 5mm NA Thread Pitch -40 to 85°C [-40 to 185°F] Temperature Range Fiber Materials PMMA Sleeve Materials PE (black) Head Materials Stainless steel Fiber Distribution Parallel arrangement **Opening Angle** 55 degrees Diameter Jacket 2.2 mm Light Emission Sidewise

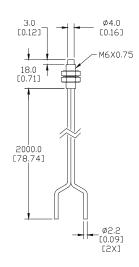




#### OPT2063 Diffuse (Reflex) Mode

<b>Specifications</b>	
Optical Fiber Core Ø	1mm
Sensing Distance with OPT series	90mm
Fiber Length (L)	2m
Fiber Bending Radius	20mm
Free Cut	Yes
Head Size	M6
Thread Pitch	0.75
Temperature Range	-40 to 85°C [-40 to 185°F]
Fiber Materials	PMMA
Sleeve Materials	PE (black)
Head Materials	Nickel-plated brass
Fiber Distribution	Parallel arrangement
Opening Angle	55 degrees
Diameter Jacket	2.2 mm
Light Emission	Straight





**tSEN-329** Photoelectric Sensors 1 - 8 0 0 - 6 3 3 - 0 4 0 5

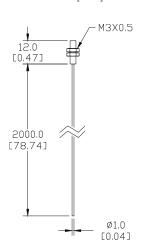
#### OPT2064 Through-Beam Mode

<b>Specifications</b>	
Optical Fiber Core Ø	0.5 mm
Sensing Distance with OPT series	160mm
Fiber Length (L)	2m
Fiber Bending Radius	15mm
Free Cut	Yes
Head Size	M3
Thread Pitch	0.5
Temperature Range	-40 to 85°C [-40 to 185°F]
Fiber Materials	PMMA
Sleeve Materials	PE (black)
Head Materials	Stainless steel
Fiber Distribution	Parallel arrangement
Opening Angle	55 degrees
Diameter Jacket	1mm
Light Emission	Straight



## **Dimensions**

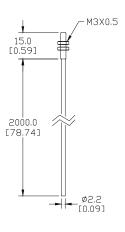
mm [inch]



#### OPT2065 Through-Beam Mode

<b>Specifications</b>	
Optical Fiber Core Ø	1mm
Sensing Distance with OPT series	400mm
Fiber Length (L)	2m
Fiber Bending Radius	30mm
Free Cut	Yes
Head Size	M3
Thread Pitch	0.5
Temperature Range	-40 to 85°C [-40 to 185°F]
Fiber Materials	PMMA
Sleeve Materials	PE (black)
Head Materials	Nickel-plated brass
Fiber Distribution	Parallel arrangement
Opening Angle	55 degrees
Diameter Jacket	2.2 mm
Light Emission	Straight

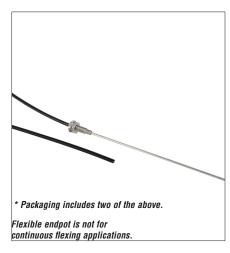




**tSEN-330** Photoelectric Sensors 1 - 8 0 0 - 6 3 3 - 0 4 0 5

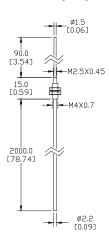
## OPT2066 Through-Beam Mode

<b>Specifications</b>	
Optical Fiber Core Ø	1mm
Sensing Distance with OPT series	400mm
Fiber Length (L)	2m
Fiber Bending Radius	30mm
Free Cut	Yes
Head Size	M4
Thread Pitch	0.7
Temperature Range	-40 to 85°C [-40 to 185°F]
Fiber Materials	PMMA
Sleeve Materials	PE (black)
Head Materials	Stainless steel
Fiber Distribution	Parallel arrangement
Opening Angle	55 degrees
Diameter Jacket	2.2 mm
Light Emission	Straight
Flexible endpot	Yes



#### **Dimensions**

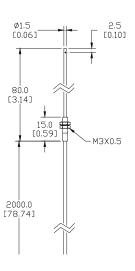
mm [inch]



#### OPT2067 Through-Beam Mode

<b>Specifications</b>	
Optical Fiber Core Ø	1mm
Sensing Distance with OPT series	200mm
Fiber Length (L)	2m
Fiber Bending Radius	30mm
Free Cut	Yes
Head Size	M3
Thread Pitch	0.5
Temperature Range	-40 to 85°C [-40 to 185°F]
Fiber Materials	PMMA
Sleeve Materials	PE (black)
Head Materials	Stainless steel
Fiber Distribution	Parallel arrangement
Opening Angle	55 degrees
Diameter Jacket	2.2 mm
Light Emission	Sidewise
Flexible endpot	Yes





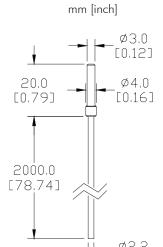
**tSEN-331** Photoelectric Sensors 1 - 8 0 0 - 6 3 3 - 0 4 0 5

# **Cuttable Fiber Optic Cable**

#### OPT2068 Through-Beam Mode

<b>Specifications</b>	
Optical Fiber Core Ø	1mm
Sensing Distance with OPT series	350mm
Fiber Length (L)	2m
Fiber Bending Radius	20mm
Free Cut	Yes
Head Size	3mm
Thread Pitch	NA
Temperature Range	-40 to 85°C [-40 to 185°F]
Fiber Materials	PMMA
Sleeve Materials	PE (black)
Head Materials	Stainless steel
Fiber Distribution	Parallel arrangment
Opening Angle	55 degrees
Diameter Jacket	2.2 mm
Light Emission	Straight

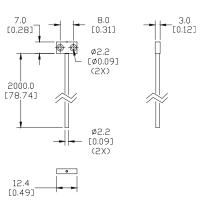




#### OPT2069 Through-Beam Mode

<b>Specifications</b>	
Optical Fiber Core Ø	1mm
Sensing Distance with OPT series	350mm
Fiber Length (L)	2m
Fiber Bending Radius	20mm
Free Cut	Yes
Head Size	12mm flat
Thread Pitch	NA
Temperature Range	-40 to 85°C [-40 to 185°F]
Fiber Materials	PMMA
Sleeve Materials	PE (black)
Head Materials	Aluminum
Fiber Distribution	Parallel arrangment
Opening Angle	55 degrees
Diameter Jacket	2.2 mm
Light Emission	Straight





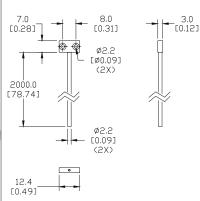
**tSEN-332** Photoelectric Sensors 1 - 8 0 0 - 6 3 3 - 0 4 0 5

## OPT2070 Through-Beam Mode

# Dimensions mm [inch]

<b>Specifications</b>	
Optical Fiber Core Ø	1mm
Sensing Distance with OPT series	200mm
Fiber Length (L)	2m
Fiber Bending Radius	20mm
Free Cut	Yes
Head Size	NA
Thread Pitch	NA
Temperature Range	-40 to 85°C [-40 to 185°F]
Fiber Materials	PMMA
Sleeve Materials	PE (black)
Head Materials	Aluminum
Fiber Distribution	Parallel arrangement
Opening Angle	55 degrees
Diameter Jacket	2.2 mm
Light Emission	Sidewise

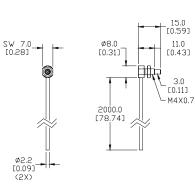




## OPT2071 Through-Beam Mode

<b>Specifications</b>	
Optical Fiber Core Ø	1mm
Sensing Distance with OPT series	250mm
Fiber Length (L)	2m
Fiber Bending Radius	2mm
Free Cut	Yes
Head Size	M4
Thread Pitch	0.7
Temperature Range	-40 to 85°C [-40 to 185°F]
Fiber Materials	PMMA
Sleeve Materials	PE (black)
Head Materials	Stainless steel
Fiber Distribution	Parallel arrangement
Opening Angle	55 degrees
Diameter Jacket	2.2 mm
Light Emission	Sidewise





**tSEN-333** Photoelectric Sensors 1 - 8 0 0 - 6 3 3 - 0 4 0 5

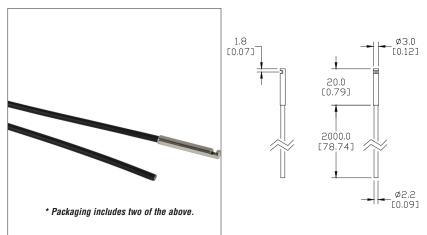
#### OPT2072 Through-Beam Mode

#### **Specifications** Optical Fiber Core Ø 1mm Sensing Distance with OPT series 200mm Fiber Length (L) 2m Fiber Bending Radius 20mm Free Cut Yes Head Size 3mm Thread Pitch NA -40 to 85°C [-40 to 185°F] Temperature Range Fiber Materials PMMA Sleeve Materials PE (black) Head Materials Stainless steel Fiber Distribution Parallel arrangement **Opening Angle** 55 degrees Diameter Jacket 2.2 mm

**Light Emission** 

#### **Dimensions**

mm [inch]

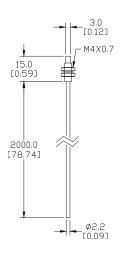


#### OPT2073 Through-Beam Mode

Sidewise

<b>Specifications</b>	
Optical Fiber Core Ø	1mm
Sensing Distance with OPT series	220mm
Fiber Length (L)	2m
Fiber Bending Radius	2mm
Free Cut	Yes
Head Size	M4
Thread Pitch	0.7
Temperature Range	-40 to 85°C [-40 to 185°F]
Fiber Materials	PMMA
Sleeve Materials	PE (black)
Head Materials	Stainless steel
Fiber Distribution	Parallel arrangement
Opening Angle	55 degrees
Diameter Jacket	2.2 mm
Light Emission	Straight





**tSEN-334** Photoelectric Sensors 1 - 8 0 0 - 6 3 3 - 0 4 0 5

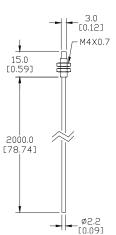
## OPT2074 Through-Beam Mode

<b>Specifications</b>	
Optical Fiber Core Ø	1mm
Sensing Distance with OPT series	350mm
Fiber Length (L)	2m
Fiber Bending Radius	20mm
Free Cut	Yes
Head Size	M4
Thread Pitch	0.7
Temperature Range	-40 to 85°C [-40 to 185°F]
Fiber Materials	PMMA
Sleeve Materials	PE (black)
Head Materials	Stainless steel
Fiber Distribution	Parallel arrangement
Opening Angle	55 degrees
Diameter Jacket	2.2 mm
Light Emission	Straight



#### **Dimensions**

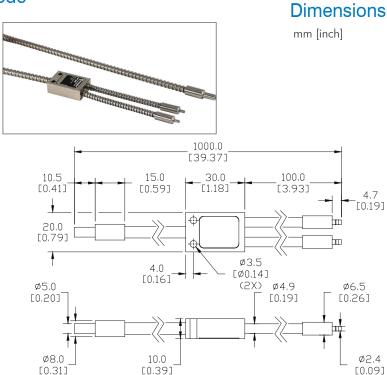
mm [inch]



**tSEN-335** Photoelectric Sensors 1 - 8 0 0 - 6 3 3 - 0 4 0 5

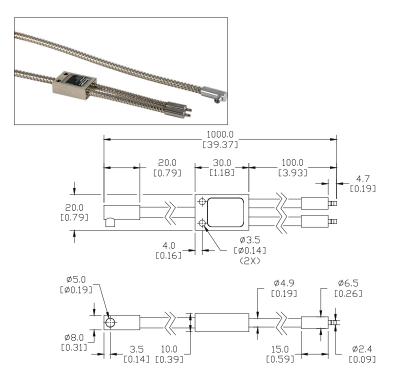
#### OPT2080 Diffuse (Reflex) Mode

#### **Specifications** Optical Fiber Core Ø 1.6 mm Sensing Distance with 160mm **OPT series** Fiber Length (L) Fiber Bending Radius 60mm Free Cut No Head Size 5mm Thread Pitch NA -25 to 180 °C [-13 to 365°F] Temperature Range Fiber Materials Glass Sleeve Materials Stainless steel Head Materials Stainless steel Fiber Diameter 50µm Fiber Distribution Statistic mixture Opening Angle 68 degrees Light Emission Straight



#### OPT2081 Diffuse (Reflex) Mode

<b>Specifications</b>	
Optical Fiber Core Ø	1.6 mm
Sensing Distance with OPT series	160mm
Fiber Length (L)	1m
Fiber Bending Radius	50mm
Free Cut	No
Head Size	5mm
Thread Pitch	NA
Temperature Range	-25 to 180 °C [-13 to 365°F]
Fiber Materials	Glass
Sleeve Materials	Nickel-plated brass
Head Materials	Aluminum
Fiber Diameter	50µm
Fiber Distribution	Statistic mixture
Opening Angle	68 degrees
Light Emission	Sidewise



**tSEN-337** Photoelectric Sensors 1 - 8 0 0 - 6 3 3 - 0 4 0 5

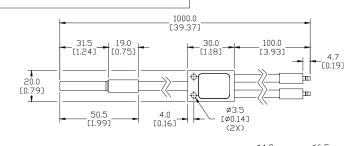
#### OPT2082 Diffuse (Reflex) Mode

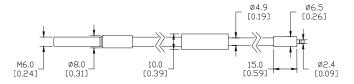
#### **Specifications** Optical Fiber Core Ø 1.6 mm Sensing Distance with OPT series 160mm Fiber Length (L) 1m Fiber Bending Radius 50mm Free Cut No Head Size M6 Thread Pitch 1.0 -25 to 180 °C (-13 to 356 °F) Temperature Range Fiber Materials Glass Sleeve Materials Nickel-plated brass Head Materials Aluminum Fiber Diameter 50um Fiber Distribution separated bundles Opening Angle 68 degrees

Light Emission

#### **Dimensions**

mm [inch]



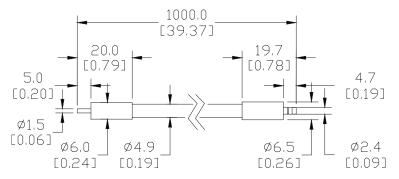


#### OPT2083 Through-Beam Mode

Straight

<b>Specifications</b>		
Optical Fiber Core Ø	0.8 mm	
Sensing Distance with OPT series	126mm	
Fiber Length (L)	1m	
Fiber Bending Radius	50mm	
Free Cut	No	
Head Size	1.2 mm	
Thread Pitch	NA	
Temperature Range	-25 to 180 °C (-13 to 356 °F)	
Fiber Materials	Glass	
Sleeve Materials	Stainless steel	
Head Materials	Stainless steel	
Fiber Diameter	50µm	
Fiber Distribution	Parallel arrangement	
Opening Angle	68 degrees	
Light Emission	Straight	





**tSEN-338** Photoelectric Sensors 1 - 8 0 0 - 6 3 3 - 0 4 0 5

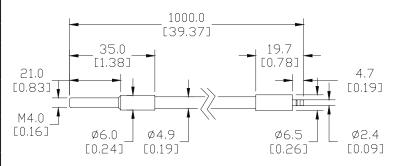
#### OPT2084 Through-Beam Mode

#### **Specifications** Optical Fiber Core Ø 1.1 mm Sensing Distance with 380mm OPT series Fiber Length (L) 1m Fiber Bending Radius 45mm Free Cut No Head Size M4 Thread Pitch 0.7 -25 to 180 °C [-13 to 365°F] Temperature Range Fiber Materials Glass Sleeve Materials Nickel-plated brass **Head Materials** Aluminum Fiber Diameter 50µm Fiber Distribution Parallel arrangement Opening Angle 68 degrees Light Emission Straight



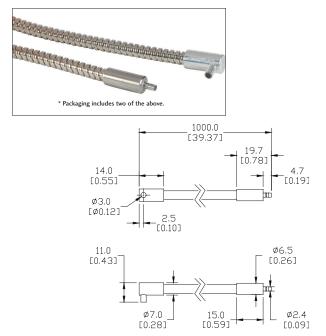
#### **Dimensions**

mm [inch]



#### OPT2085 Through-Beam Mode

<b>Specifications</b>	
Optical Fiber Core Ø	1.1 mm
Sensing Distance with OPT series	380mm
Fiber Length (L)	1m
Fiber Bending Radius	45mm
Free Cut	No
Head Size	Ø3 mm
Thread Pitch	0.7
Temperature Range	-25 to 180 °C [-13 to 365°F]
Fiber Materials	Glass
Sleeve Materials	Nickel-plated brass
Head Materials	Aluminum
Fiber Diameter	50µm
Fiber Distribution	Parallel arrangement
Opening Angle	68 degrees
Light Emission	Sidewise



**tSEN-339** Photoelectric Sensors 1 - 8 0 0 - 6 3 3 - 0 4 0 5

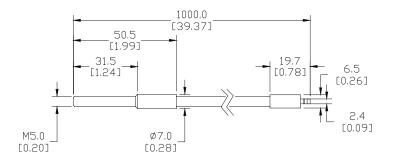
## OPT2086 Through-Beam Mode

<b>Specifications</b>	
Optical Fiber Core Ø	1.6 mm
Sensing Distance with OPT series	480mm
Fiber Length (L)	1m
Fiber Bending Radius	45mm
Free Cut	No
Head Size	M5
Thread Pitch	0.8
Temperature Range	-25 to 180 °C [-13 to 365°F]
Fiber Materials	Glass
Sleeve Materials	Nickel-plated brass
Head Materials	Aluminum
Fiber Diameter	50µm
Fiber Distribution	Parallel arrangment
Opening Angle	68 degrees
Light Emission	Straight



#### **Dimensions**

mm [inch]



**tSEN-340** Photoelectric Sensors 1 - 8 0 0 - 6 3 3 - 0 4 0 5