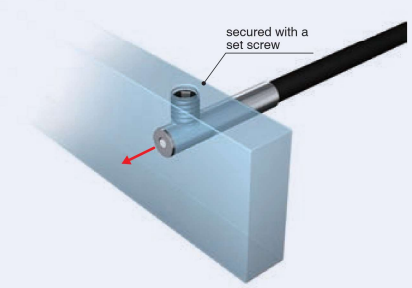
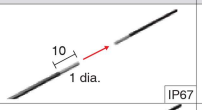
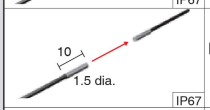


- Inserted where space is limited. (Secured using a set screw.)
- Ultramate space-saving by micro-fiber head. (1 dia. × 10 mm)

- Side-view models can be mounted where there is limited depth.

Specifications

Through-beam Fiber Units

Size	Sensing direction	Appearance (mm)	Bending radius of cable	Sensing distance (mm) E3X-HD GIGA	E3X-HD HS	E3X-HD Other modes	E3NX-FA NEW GIGA	E3NX-FA NEW HS	E3NX-FA NEW Other modes	Optical axis diameter (minimum sensing object)	Models	11 Page Dimensions No.
1 dia.	Top-view		Flexible, R1	450	150	ST : 250 SHS: 60	670	220	ST : 370 SHS: 60	0.5 dia. (5 μm dia./ 2 μm dia.)	E32-T223R 2M	11-A
1.5 dia.	Top-view		Bendresistant, R4	680	220	ST : 400 SHS: 90	1,020	330	ST : 600 SHS: 90		E32-T22B 2M	11-B
3 dia.	Top-view		Flexible, R1	2,000	700	ST : 1,000 SHS: 280	3,000	1,050	ST : 1,500 SHS: 280	1 dia. (5 μm dia./ 2 μm dia.)	E32-T12R 2M	11-C
	Side-view			750	260	ST : 450 SHS: 100	1,120	390	ST : 670 SHS: 100		E32-T14LR 2M	11-D

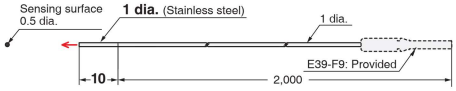
Note 1. The following mode names and response times apply to the modes given in the Sensing distance column.
[E3X-HD] GIGA: Giga-power mode (16 ms), HS: High-speed mode (250 μs), ST: Standard mode (1 ms), and SHS: Super-high-speed mode (NPN output: 50 μs, PNP output: 55 μs)
[E3NX-FA] GIGA: Giga-power mode (16 ms), HS: High-speed mode (250 μs), ST: Standard mode (1 ms), and SHS: Super-high-speed mode (30 μs)
2. The values for the minimum sensing object are reference values that indicate values obtained in standard mode with the sensing distance and sensitivity set to the optimum values. The first value is for the E3X-HD and the second value is for the E3NX-FA.
3. The sensing distances for E3NX-FA are values for E3NX-FA□ models. The distances for E3NX-FAH□ infrared models are different.

Dimensions

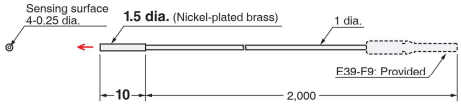
Installation Information → 60 Page

Through-beam Fiber Units (Set of 2)

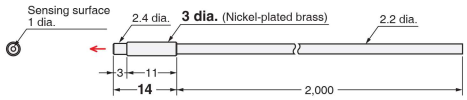
11-A E32-T223R 2M (Free Cutting)



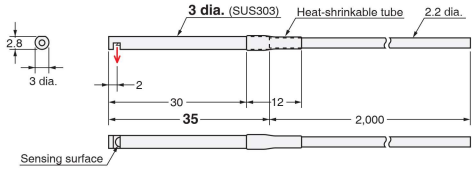
11-B E32-T22B 2M (Free Cutting)



11-C E32-T12R 2M (Free Cutting)



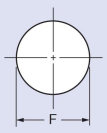
11-D E32-T14LR 2M (Free Cutting)



- Reference Information for Model Selection -

Recommended Mounting Hole Dimensions

The recommended mounting-hole dimensions for Cylindrical Fiber Units are given below.



(Unit: mm)

Outer diameter of Fiber Unit	1 dia.	1.5 dia.	3 dia.
Dimension F	1.2 $^{+0.5}_{0}$ dia.	1.7 $^{+0.5}_{0}$ dia.	3.2 $^{+0.5}_{0}$ dia.

Installation Information

Models	Installation			Cable						Weight (packed state) (g)	Dimensions Page No.
	Ambient temperature	Tightening torque	Mounting hole	Bending radius	Unbendable length*1	Tensile strength	Sheath material	Core material	Emitter/receiver differentiation		
E32-LR11NP 2M	−40 to 70°C *2	0.98N · m	6.2$^{+0.5}_{0}$ dia.	R2	0	29.4N	Polyethylene	Plastic	None	40	35 Page 35-A 99 Page 99-G
E32-LT11 2M	−40 to 70°C	0.78N · m	–	R25	10	29.4N	Polyethylene	Plastic	None	40	07 Page 07-C 25 Page 25-C
E32-LT11N 2M	−40 to 70°C	0.78N · m	4.2$^{+0.5}_{0}$ dia.	R2	0	29.4N	Polyethylene	Plastic	None	40	25 Page 25-A 99 Page 99-A
E32-LT11R 2M	−40 to 70°C	0.78N · m	–	R1	0	29.4N	Polyethylene	Plastic	None	40	07 Page 07-C 25 Page 25-C
E32-LT35Z 2M	−40 to 70°C	0.15N · m	–	R1	0	9.8N	Polyethylene	Plastic	None	25	15 Page 15-D
E32-R16 2M	−25 to 55°C	0.54N · m	–	R25	10	29.4N	Polyethylene	Plastic	None	220 (E39-R1 included.)	35 Page 35-B
E32-R21 2M	−40 to 70°C	0.39N · m	6.2$^{+0.5}_{0}$ dia.	R10	10	9.8N	Polyethylene	Plastic	None	70 (E39-R3 included.)	35 Page 35-C
E32-T10V 2M	−25 to 70°C	0.3N · m	–	R25	10	29.4N	Fluororesin	Plastic	None	170	53 Page 53-D
E32-T11 2M	−40 to 70°C	0.78N · m	4.2$^{+0.5}_{0}$ dia.	R4	10	29.4N	PVC	Plastic	None	40	41 Page 41-C
E32-T11F 2M	−40 to 70°C	0.29N · m	–	R4	10	29.4N	Fluororesin	Plastic	None	60	39 Page 39-C
E32-T11N 2M	−40 to 70°C	0.78N · m	4.2$^{+0.5}_{0}$ dia.	R1	0	29.4N	PVC	Plastic	None	70	07 Page 07-A
E32-T11NF 2M	−25 to 70°C	12N · m	8.5$^{+0.5}_{0}$ dia.	R1	0	29.4N	Fluororesin	Plastic	None	80	39 Page 39-A
E32-T11NFS 2M	−25 to 70°C	0.78N · m	4.2$^{+0.5}_{0}$ dia.	R1	0	29.4N	Fluororesin	Plastic	None	70	39 Page 39-A2
E32-T11R 2M	−40 to 70°C	0.78N · m	4.2$^{+0.5}_{0}$ dia.	R1	0	29.4N	PVC	Plastic	None	50	07 Page 07-B
E32-T12F 2M	−40 to 70°C	0.78N · m	5.5$^{+0.5}_{0}$ dia.	R40	10	29.4N	Fluororesin	Plastic	None	210	39 Page 39-B
E32-T12R 2M	−40 to 70°C	0.29N · m	3.2$^{+0.5}_{0}$ dia.	R1	0	29.4N	PVC	Plastic	None	60	11 Page 11-C
E32-T14 2M	−40 to 70°C	0.49N · m	–	R25	10	29.4N	Polyethylene	Plastic	None	60	25 Page 25-D
E32-T14F 2M	−40 to 70°C	0.78N · m	5.5$^{+0.5}_{0}$ dia.	R40	10	29.4N	Fluororesin	Plastic	None	220	39 Page 39-D
E32-T14LR 2M	−40 to 70°C	0.29N · m	3.2$^{+0.5}_{0}$ dia.	R1	0	29.4N	PVC	Plastic	None	60	11 Page 11-D
E32-T15XR 2M	−40 to 70°C	0.15N · m	–	R1	0	29.4N	PVC	Plastic	None	60	15 Page 15-A
E32-T15YR 2M	−40 to 70°C	0.15N · m	–	R1	0	29.4N	PVC	Plastic	None	60	15 Page 15-B
E32-T15ZR 2M	−40 to 70°C	0.15N · m	–	R1	0	29.4N	PVC	Plastic	None	60	15 Page 15-C
E32-T16JR 2M	−40 to 70°C	0.29N · m	–	R1	0	9.8N	PVC	Plastic	None	60	49 Page 49-B
E32-T16PR 2M	−40 to 70°C	0.29N · m	–	R1	0	9.8N	PVC	Plastic	None	60	49 Page 49-A
E32-T16WR 2M	−25 to 55°C	0.29N · m	–	R1	0	9.8N	PVC	Plastic	None	60	49 Page 49-C
E32-T17L 10M	−40 to 70°C	0.78N · m	14.5$^{+1}_{0}$ dia.	R25	10	29.4N	Polyethylene	Plastic	None	240	25 Page 25-B
E32-T21 2M	−40 to 70°C	0.78N · m	3.2$^{+0.5}_{0}$ dia. *3	R4	10	9.8N	PVC	Plastic	None	30	41 Page 41-B
E32-T21-S1 2M	−40 to 70°C	0.78N · m	3.2$^{+0.5}_{0}$ dia. *3	R10	10	9.8N	Polyethylene	Plastic	None	45	17 Page 17-D
E32-T223R 2M	−40 to 70°C	0.20N · m	1.2$^{+0.5}_{0}$ dia.	R1	20	9.8N	Polyethylene	Plastic	None	40	11 Page 11-A
E32-T22B 2M	−40 to 70°C	0.20N · m	1.7$^{+0.5}_{0}$ dia.	R4	10	9.8N	PVC	Plastic	None	40	11 Page 11-B 41 Page 41-A
E32-T22S 2M	−40 to 70°C	0.29N · m	3.2$^{+0.5}_{0}$ dia.	R10	10	29.4N	PVC	Plastic	None	60	31 Page 31-F
E32-T24E 2M	−40 to 70°C	0.29N · m	2.7$^{+0.5}_{0}$ dia.	R10	10	9.8N	Polyethylene	Plastic	None	40	17 Page 17-B
E32-T24R 2M	−40 to 70°C	0.29N · m	2.2$^{+0.5}_{0}$ dia.	R1	0	9.8N	Polyethylene	Plastic	None	40	17 Page 17-A
E32-T24S 2M	−40 to 70°C	0.29N · m	–	R10	10	29.4N	PVC	Plastic	None	60	31 Page 31-E 57 Page 57-E
E32-T24SR 2M	−40 to 70°C	0.29N · m	–	R1	0	9.8N	PVC	Plastic	None	60	31 Page 31-D 57 Page 57-D
E32-T25XB 2M	−40 to 70°C	0.15N · m	–	R4	10	9.8N	PVC	Plastic	None	40	41 Page 41-D

*1 Unbendable length of cable from fiber head.
Do not bend the cable for at least 20 mm from where the cable inserts into the Fiber Amplifier Unit.
*2 Ambient operating temperature of the recommended reflector (E39-RP1) is −40 to 60°C.
*3 For embedded mounting, prepare a hole with a diameter of 2.6 mm.