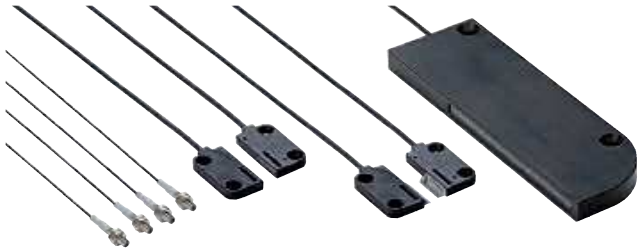
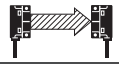
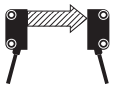
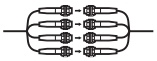


Area monitoring fiber sensor heads

When mounting space is crucial or the objects are very small, the area monitoring fibers provide a reliable object detection even when the object position varies within the monitored range.
In combination with the window monitoring function or the serial transmission of the received light level values of the fiber amplifiers, simple height comparison or measuring applications can be realized.

- Area monitoring up to 70 mm height
- Multi-beam sensor with 4 separate heads for flexible detection points
- Standard or high flex fibers

Ordering information

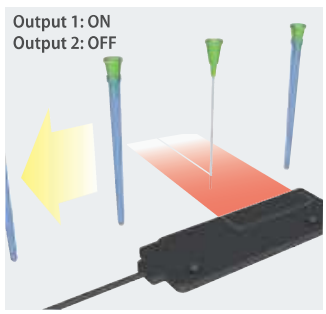
Sensor type	Sensing height (in mm)	Sensing distance (in mm)*1				Order code	
		Standard fiber		High-flex fiber		Standard fiber	High-flex fiber
		E3X-HD	E3NX-FA	E3X-HD	E3NX-FA		
	10	4000	4000	–	–	E32-T16	–
 *2	11	2200	3300	1700	2550	E32-T16P	E32-T16PR 2M
	30	3600	4000	2600	3900	E32-T16W 2M	E32-T16WR 2M
	50	–	–	3000	4000	–	E32-ET16WR-2 2M
	70	–	–	3500	4000	–	E32-ET16WR-1 2M
	11	2000	3000	1500	2200	E32-T16J 2M	E32-T16JR 2M
	4 × seperate M3 heads	1300	1900	–	–	E32-M21	–
	11	–	–	300	450	–	E32-D36P1 2M

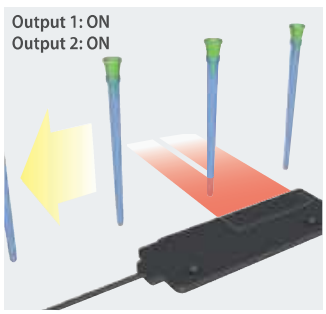
*1 Sensing distance measured with Standard mode
*2 Sensing area aligned to top of housing.

Specifications

Item		Standard			High-flex		
		E32-T16	E32-M21	E32-T16J E32-T16P E32-T16W	E32-D36P1	E32-ET16WR-1 E32-ET16WR-2	E32-T16JR E32-T16PR E32-T16WR
Permissible bending radius		R25		R10	R4	R1	
Cut to length		Yes					
Ambient temperature		–40°C to 70°C					
Material	Head	ABS	Stainless steel	ABS	Brass-nickel plated	Aluminium	ABS
	Fiber	PMMA					
	Sheath	Polyethylene coating		PVC coating	Polyethylene coating		PVC coating
Degree of protection		IEC 60529 IP67		IEC 60529 IP50		IEC 60529 IP54	IEC 60529 IP50

The two outputs of the E3NX-FA can be used to detect two different light levels





In combination with the twin output function of the E3NX-FA amplifier, the diffuse reflective area monitoring fibers can detect very small objects (e.g. needles) and a second state (e.g cover present). The area beam compensates for position variations at high speed.