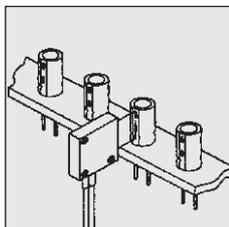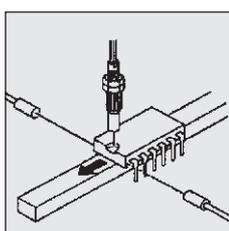Combined position control

Label detection

Combined positioning

FX7 Series
Amplifiers for Optical Fibre Sensors

The FX7 sensors are particularly noted for their ease of operation and special intelligent functions. The sensor is set up at the press of a button. A stability indicator then keeps you informed that detection is safe.
These sensors can be used in any applications where
a) there is not much room to fit them
b) the objects to be detected are extremely thin or
c) they need to be integrated in a mobile arrangement.

Characteristics:

- Convenient "Teach-in" method to set sensitivity
- OFF delay
- Stability indicator for safer detection
- Crosstalk prevention
- Model with external synchronization and test input
- Model with external "Teach-In" method
- Model with green LED
- Narrow design (10 mm)
- Cable or plug connection
- Large selection of standard and special optical fibres

NPN output	FX7 (J)	FX7G (J)	FX75	FX77
PNP output	FX7P (J)	FX7GP (J)		

Amplifier type	Standard	Standard green LED	Synchronization function external	Sensitivity externally adjustable
OFF delay	40 ms	40 ms	—	40 ms
Crosstalk prevention	•			
Mode indicator LED (green)	"Run" mode: Lights up during stable object detection "SET" mode: Flashes during teach-in (twice, if the difference between the ON and OFF switching point is greater than the hysteresis, 15 times if the switching difference is less than the hysteresis). „SET" mode: Flashes up to 5 times, depending on the stability reserve, when changing to "RUN" or "SIF" mode.			
Rated sensing distance	Dependent on the optical fibre			
Response time	max. 0.5 ms (max. 0.7 ms with crosstalk prevention)			
Outputs — Transistor	max. 100 mA			
Outputs — Self-diagnostic	50 mA			
Emitting diode	Red LED, 660 nm	Green LED, 565 nm	Red LED, 660 nm	
Current consumption	max. 30 mA			
Housing material	Heat resistant ABS			
Protection	IP 40			
Physical size (H x W x D)	59 x 10 x 31.5 mm			
Connection method	Cable 2 m; plug connection = (J)			
Operating voltage	12 – 24 V DC (± 10 %)			
Usable ambient temp.	-10°C to +50°C			
Weight	approx. 65 g			