

A fiber-optic sensor system consists of a fiber-optic cable and an amplifier. The amplifier emits, receives and converts the light energy into an electrical signal. The fiber-optic cable, on the other hand, is the mechanical component that transports light energy, in-to and out-of areas that are either too space confined or environmentally unfriendly, back to the amplifier. These two components are purchased "separately" to make up the fiber-optic sensing system.

Digital Fiber-Optic Amplifier — E3X-DA-S Series



E3X-DA11-S



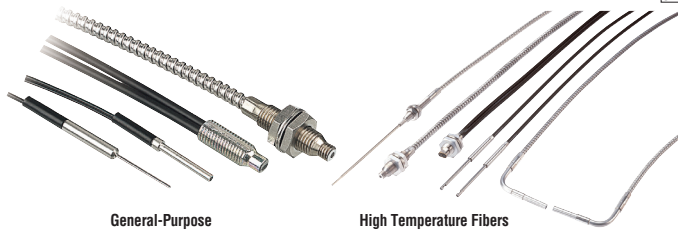
E3X-MC11-SV2



- Features:**
- ▶ Power Turning Function Addresses Saturation or Insufficient Light Conditions
 - ▶ Dual Digital Display Enables Simultaneous Monitoring of Current and Present Values
 - ▶ Four Element LED and Auto Power Control Ensure Stable, Long Term Performance
 - ▶ Advanced Functions Include Differential Operation for Minute Detection, 2 Independent Outputs for Area Detection, Remote Input Function and Counter Function
 - ▶ Improved Mobile Console
 - ▶ Same Ease-of-Use as the E3X-DA-N Amplifiers
 - ▶ Highest Speed in the Industry

Stock No.	Mfr.'s Type	Description	EACH
834-0385	E3X-DA11-S	Standard, NPN Output, Unit with Cable	207.62
834-5129	E3X-DA41N	Standard, PNP Output, Unit with Cable	283.69
834-0664	E3X-MC11-SV2	Programmable Mobile Console Kit with Head, Cable and AC Adapter	568.92

Fiber-Optic Cables



General-Purpose

High Temperature Fibers

Extensive selection of fiber-optic sensing heads offer many unique solutions for tough problems. For custom fit, most plastic filament cables can be cut to length. Highly flexible fibers with minimum 1 mm bending radius allows cables to conform to machine contours.

General-Purpose (Thru-Beam)

Stock No.	Mfr.'s Type	Description	EACH
834-2090	E32-T11R	M4, 0.55" (14 mm)	128.29
834-2091	E32-T21R	M3, 0.37" (9.5 mm)	117.39
834-5567	E32-T14L	0.12" (3 mm) x 1.38" (35 mm)	109.00
834-0337	E32-TC200	0.16" (4 mm) Diameter Threaded Head	65.39

General-Purpose Fibers (Diffuse)

834-0088	E32-CC200	M6, 0.79" (20 mm)	99.74
834-2092	E32-D11R	M6, 0.67" (17 mm)	103.38
834-2093	E32-D21R	M3, 0.43" (11 mm)	103.38
834-5569	E32-D14L	0.24" (6 mm)	151.98
834-5570	E32-DC32	0.08" (2 mm) x 1.14" (29 mm)	127.54
834-5571	E32-DC24	0.08" (2 mm) x 0.12" (3 mm) Tapered Head	144.67
834-0338	E32-DC200	0.24" (6 mm) Diameter Threaded Head	65.38

High Temperature Fibers (Thru-Beam)

834-0308	E32-T61S	M4, 0.79" (20 mm)	360.00
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Chemical Resistant Fibers (Thru-Beam)

834-5135	E32-T14F	0.12" (3 mm) Diameter	571.08
834-5138	E32-T54	0.04" (1 mm) Diameter	571.08

Chemical Resistant Fibers (Diffuse)

834-5139	E32-D12F	0.24" (6 mm) Diameter	489.68
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Narrow Vision Field Fibers (Thru-Beam)

834-5140	E32-T22S	0.12" (3 mm) Diameter	209.28
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Lens Kit

834-0339	E39-F1	Long-Range Lens Attachment for Fibers	35.04
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High Performance Fiber-Optic Amplifier — E3X Series



- Features:**
- ▶ Ultra-Fast 200 Micro-Second Response Time
 - ▶ Pulse-Modulated Red LED
 - ▶ User Friendly Features:
 - 8-Turn Sensitivity with Position Indicator
 - Slim Body Mounts on DIN-Rail
 - IP66 Enclosure Rating
 - ▶ Light-ON, Dark-ON or SET Operation Modes (Switch Selectable)
 - ▶ Set-Mode 'Blinking' Light Source Aides Alignment

Stock No.	Mfr.'s Type	Description	EACH
834-5564	E3X-A21	NPN Output, Self-Diagnostic Function and Off-Delay Timer	199.58
834-0883	E3X-A51 2M	PNP Output, Self-Diagnostic Function and Off-Delay Timer	132.82

Auto-Tuning Fiber-Optic Amplifier — E3X-N Series



High-performance DC amplifier with pushbutton sensitivity adjustment. Sensing distance is up to 100% longer than standard amplifiers. Up to 82.68" (2.1 m) with lens attachment. Four amplifiers in a single housing saves space and wiring. Compact housing. **NT:** 1.30" H x 0.39" W x 2.32" D (33 x 10.0 x 59 mm). **NM:** 1.30" H x 1.27" W x 2.32" D (33 x 32.2 x 59 mm). Four fiber-optic cables can be mounted directly next to each other without mutual interference. Fast 0.5 ms response time with switch selectable Light-ON/Dark-ON mode. 12-24 VDC supply voltage with 100 mA output. Units come pre-wired with 6.5' of cable. Units can be DIN-rail or panel-mounted. **Enclosure Rating:** IP50 (with cover on).

- ▶ DC Amplifier with Pushbutton Sensitivity Adjustment
- ▶ Choose from Single or Four-Channel Models
- ▶ Fast 0.5 ms Response Time
- ▶ Pulse Modulated Red LED
- ▶ Light-ON, Dark-ON (Switch Selectable)
- ▶ Control Output: NPN Open Collector
- ▶ Enclosure Rating: IP50

Stock No.	Mfr.'s Type	Description	EACH
834-0335	E3X-NT11	General-Purpose, Single-Channel	225.17
834-0336	E3X-NM11	Four-Channel, Remote Teach Input, Off-Delay Timer	513.25

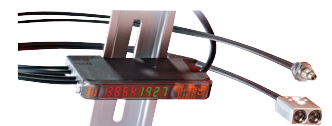
User-Friendly Fiber-Optic Amplifier — E3X-NA Series



- Features:**
- ▶ Streamlined Features Provide Basic Sensing Immediately After Plug-In
 - ▶ Wire-Saving Amplifiers Reduce Installation Time and Minimize Space Requirements
 - ▶ Master/Slave Connector Design Affords Connectivity for Up to Sixteen Wire-Saving Amplifiers
 - ▶ Use the LED Bar Display to Quickly Confirm Sensor Performance
 - ▶ Optical Communication Design Prevents Mutual Interference for Up to Five Amplifiers
 - ▶ Green LED Models Address Mark-Detecting Applications
 - ▶ High-Speed Models Have a Response Time of 50 µs
 - ▶ Select a Water-Resistant Model (IP66 Rating) Using an M8 Connector
 - ▶ Prewired Water-Resistant Models Are Available

Stock No.	Mfr.'s Type	Description	EACH
834-0397	E3X-NA11	Standard, NPN Output, Pre-Wired	179.90
834-0398	E3X-NA11F-2M	High-Speed Detection, NPN Output, Pre-Wired	247.20
834-0399	E3X-NAG11	Mark-Detecting, NPN Output, Pre-Wired	201.19
834-0400	E3X-NA41	Standard, PNP Output, Pre-Wired	179.87
834-5133	E3X-CN12	Slave Connector, 2 m Cable Length, 1 Conductor	17.80
834-5132	E3X-CN11	Master Connector, 2 m Cable Length, 3 Conductors	20.49

Advanced Dual Fiber-Optic Amplifier — E3X-MDA Series



Two amplifiers squeezed into a single sensor provide significant, space and labor savings.

- Features:**
- ▶ Two Channels Accept Two Sets of Fiber Cables
 - ▶ AND/OR Control Output Eliminates the Need for a PLC or Sensor Controller
 - ▶ Four Element LED and Auto Power Control Ensure Stable, Long Term Performance
 - ▶ Improved Remote Programmer
 - ▶ Same Ease-of-Use as the E3X-DA-N Amplifiers

Stock No.	Mfr.'s Type	Description	EACH
834-0391	E3X-MDA11	2-Channel Model, NPN Output, with Cable	329.76
834-0392	E3X-MDA41	2-Channel Model, PNP Output, Unit with Cable	323.29
834-0395	E3X-CN21	Master Connector, 2 m Cable Length, 4 Conductors	23.39