

















## Selection table



### Fiber sensors

Type	Cylindrical	Square shape	Miniature	Longer distance	Chemical resistant
					
<b>Model</b>	<b>E32 Standard cylindrical</b>	<b>E32 Square shape</b>	<b>E32 Miniature</b>	<b>E32 Longer distance</b>	<b>E32 Chemical resistant</b>
<b>Key features</b>	<ul style="list-style-type: none"> <li>• standard and high-flex fibers</li> <li>• sizes M3 to M6</li> </ul>	<ul style="list-style-type: none"> <li>• 3 or 4 mm thin housing</li> <li>• models in X, Y or Z-axis</li> </ul>	<ul style="list-style-type: none"> <li>• sizes from dia 500 µm to 3 mm</li> <li>• bendable sleeves</li> </ul>	<ul style="list-style-type: none"> <li>• built in focal lenses</li> </ul>	<ul style="list-style-type: none"> <li>• fluoroplastic cover or coating</li> </ul>
<b>Through-beam</b>	760 mm	760 mm	750 mm	20 m	3 m
<b>Retro-reflective</b>	250 mm	–	–	1.5 m	–
<b>Diffuse-reflective</b>	300 mm	300 mm	300 mm	700 mm	170 mm
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### Fiber optic amplifiers

Type	Easy teach	Potentiometer adjuster	High functionality	Auto compensation	Double amplifier
					
<b>Model</b>	<b>E3X-DA-SE-S</b>	<b>E3X-NA</b>	<b>E3C-DA-S</b>	<b>E3X-DA-AT-S</b>	<b>E3X-MDA</b>
<b>Key features</b>	<ul style="list-style-type: none"> <li>• 1 button object teaching</li> <li>• auto teach during operation</li> </ul>	<ul style="list-style-type: none"> <li>• easy adjustment by potentiometer</li> </ul>	<ul style="list-style-type: none"> <li>• High functionality signal processing (timer, counter, power tuning, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• Active threshold control</li> </ul>	<ul style="list-style-type: none"> <li>• 2 inputs and AND, OR signal comparison</li> </ul>
<b>Response time (min.)</b>	1 ms	200 µs	1 ms (55 µs in high speed mode)	1 ms (80 µs in super high speed mode)	1 ms (130 µs in super high speed mode)
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Heat resistant	Vacuum resistant	Robot applications	Precision detection	Area monitoring	Special application
					
<b>E32 Heat resistant</b>	<b>E32 Vacuum resistant</b>	<b>E32 Robot</b>	<b>E32 Precision detection</b>	<b>E32 Area monitoring</b>	<b>E32 Special</b>
• heat resistant up to 400°C	• leakage rate of $1 \times 10^{-10}$ Pa·m <sup>3</sup> /s max	• >1 Mio bending cycles	• detection accuracy up to 100 µm	• area monitoring from 10 mm up to 70 mm	• detection of special objects
1.3 m	480 mm	680 mm	1.9 m	2.8 mm	1.9 m
–	–	–	–	–	–
280 mm	–	170 mm	300 mm	150 mm	300 mm
243	244	245	246	247	248

High speed	Colour/print mark detection
	
<b>E3X-NA-F</b>	<b>E3X-DAC-S</b>
• Short turn on time of 20 µs	• White LED and RGB ratio comparison
20 µs	1 ms (60 µs in high speed mode)
256	257