












Special Purpose Inductive Proximity Switches


















# Overview











<b>Housing</b>	Cylindrical			
<b>Model</b>	E2AU	E2EZ	E2AX	E2EQ
<b>Type</b>	Vehicle usage certified (e1 mark)	AL and FE chip immune	ATEX 3D certified	Spatter resistance
<b>Housing Material</b>	Brass	Brass (ABS/ PBT sensing face)	Brass	Teflon coated brass (teflon sensing face)
<b>Features</b>	<ul style="list-style-type: none"> <li>E1 mark for mobile usage</li> <li>High EMC immunity (additional test up to 100 V/m)</li> <li>Cable breakage protection</li> <li>Available on request for all E2A types</li> </ul>	<ul style="list-style-type: none"> <li>Specialized sensing method for immunity against small sized metal objects (e.g. chips)</li> </ul>	<ul style="list-style-type: none"> <li>ATEX Cat 3D certification</li> </ul>	<ul style="list-style-type: none"> <li>Teflon coating for preventing the attachment of splatters in welding applications</li> </ul>
<b>Application areas</b>	<ul style="list-style-type: none"> <li>Utility vehicles</li> <li>Mobile construction equipment</li> <li>RCVs (refuse collecting vehicles)</li> <li>Mobile agricultural equipment (e.g. harvester)</li> </ul>	<ul style="list-style-type: none"> <li>Metal cutting in machine tool industry</li> </ul>	<ul style="list-style-type: none"> <li>Powder handling and packaging (flour packaging)</li> <li>Wood cutting/ wood chip handling</li> </ul>	<ul style="list-style-type: none"> <li>Welding applications</li> </ul>
<b>Key specifications</b>	<ul style="list-style-type: none"> <li>NO</li> <li>DC 3-wire</li> <li>12 - 24 VDC (10 - 32 VDC)</li> <li>IP67, IP69k</li> </ul> 	<ul style="list-style-type: none"> <li>NO or NC (DC 2-wire only)</li> <li>DC 3-wire, DC 2-wire</li> <li>12 - 24 VDC (10 - 30 VDC)</li> <li>IP67</li> </ul> 	<ul style="list-style-type: none"> <li>NO</li> <li>DC 3-wire</li> <li>12 - 24 VDC (10 - 32 VDC)</li> <li>IP67, IP69k</li> </ul> 	<ul style="list-style-type: none"> <li>NO</li> <li>DC 2-wire</li> <li>12 - 24 VDC (10 - 32 VDC)</li> <li>IP67</li> </ul> 
<b>Max sensing distance</b>	M12: 4 mm M18: 8 mm M30: 15 mm	M12: 2 mm (DC 2-wire only) M18: 4 mm M30: 8 mm	M12: 4 mm M18: 8 mm M30: 15 mm	M12: 4 mm M18: 8 mm M30: 15 mm
<b>Connection</b>	Cable: PVC (2 m)  Connector: M12 	Cable: PVC  Connector: M12 	Connector: M12 	Cable: PVC  Connector: M12 
<b>Page</b>	D-151	D-161	(CD)	D-171

Overview

Special Purpose Inductive Proximity Switches

				
<b>Housing</b>	Cylindrical			
<b>Model</b>	E2F, E2E	E2E	E2C-EDA	E2EL
<b>Type</b>	AC power supply	Oil resistant	High precision positioning	Increased switching frequency for high speed applications
<b>Housing Material</b>	Plastic, brass	Brass	Brass	Brass, stainless steel
<b>Features</b>	<ul style="list-style-type: none"> <li>• 24 - 240 VAC direct switching</li> </ul>	<ul style="list-style-type: none"> <li>• tested oil resistance</li> <li>• designed for automotive users</li> </ul>	<ul style="list-style-type: none"> <li>• Accuracy 1µm</li> </ul>	<ul style="list-style-type: none"> <li>• Up to 5kHz switching frequency</li> </ul>
<b>Application areas</b>	<ul style="list-style-type: none"> <li>• Installations without controller/PLC and 230 VAC power supply</li> </ul>	<ul style="list-style-type: none"> <li>• Automotive manufacturing lines</li> </ul>	<ul style="list-style-type: none"> <li>• Precision positioning</li> </ul>	<ul style="list-style-type: none"> <li>• Counting</li> <li>• Rotation speed control</li> <li>• CAM</li> </ul>
<b>Key specifications</b>	<ul style="list-style-type: none"> <li>• NO, NC</li> <li>• AC 2-wire</li> <li>• 24 - 240 VAC</li> <li>• IP67</li> </ul> 	<ul style="list-style-type: none"> <li>• NO, NC</li> <li>• DC 3-wire, DC 2-wire</li> <li>• 12 - 24 VDC (10 - 30 VDL)</li> <li>• IP 67</li> </ul>	<ul style="list-style-type: none"> <li>• 12 - 24 VDC (10 - 30 VDC)</li> <li>• IP67 (sensing heads)</li> <li>• IP50 (separate amplifier)</li> </ul> 	<ul style="list-style-type: none"> <li>• NO, NC</li> <li>• DC 3-wire</li> <li>• 10 - 35 VDC</li> <li>• IP67</li> </ul> 
<b>Max sensing distance</b>	M8: 2 mm M12: 5 mm M18: 10 mm M30: 18 mm	M8: 4 mm M12: 8 mm M18: 14 mm M30: 20 mm	dia 3 mm: 0.6 mm dia 5.4 mm: 1 mm dia 8mm: 2 mm M10: 2 mm M18: 7 mm	dia 6.5 mm: 2 mm M8: 2 mm
<b>Connection</b>	Cable: PVC  Cable: M12  Connector: M12 	Cable: PVC  Cable: M12  Connector: M12 	Cable: PVC 	Cable: PVC  Cable connector: M8, M12, custom-specific  Connector: M8 
<b>Page</b>	D-29	D-45	D-83	D-99

			
<b>Housing</b>	Cylindrical		
<b>Model</b>	E2EC	E2FQ	ZX-E
<b>Type</b>	Ultra flat/ sub miniature	Chemical resistance	High precision distance measurement
<b>Housing Material</b>	Brass (sensing face: ABS)	Teflon	
<b>Features</b>	<ul style="list-style-type: none"> <li>• Ultra flat/ small size for applications where space is crucial</li> <li>• Dia 3 mm small housing size model</li> <li>• Ultra short 18 mm long M12 size housing model</li> </ul>	<ul style="list-style-type: none"> <li>• Teflon housing for increased chemical resistance</li> </ul>	<ul style="list-style-type: none"> <li>• 1 μm measurement resolution</li> </ul>
<b>Application areas</b>	<ul style="list-style-type: none"> <li>• Robotic applications (in robot hands)</li> </ul>	<ul style="list-style-type: none"> <li>• Application with aggressive chemicals (etching, cleaning, water treatment)</li> </ul>	<ul style="list-style-type: none"> <li>• Excentricity control</li> </ul>
<b>Key specifications</b>	<ul style="list-style-type: none"> <li>• NO, NC (DC 2-wire only)</li> <li>• DC 2-wire, DC 3-wire</li> <li>• 12 - 24 VDC (10 - 30 VDC)</li> <li>• IP67</li> </ul> 	<ul style="list-style-type: none"> <li>• NO</li> <li>• DC 2-wire</li> <li>• 12 - 24 VDC (10 - 30 VDC)</li> <li>• IP67</li> </ul> 	<ul style="list-style-type: none"> <li>• Linear 4 - 20 mA output</li> <li>• 12 - 24 VDC (10 - 30 VDC)</li> <li>• IP67</li> </ul>
<b>Max sensing distance</b>	dia 3 mm: 0.8 mm dia 5.4 mm: 1.5 mm dia 8 mm: 3 mm M12: 4 mm	M12: 2 mm M18: 5 mm M30: 10 mm	dia 3 mm: 0.5 mm dia 5.4 mm: 1 mm dia 8 mm: 2 mm M10: 2 mm M18: 7 mm
<b>Connection</b>	Cable: PVC 	Cable: PVC 	Cable: PVC 
<b>Page</b>	D-107	D-167	B-61

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.