Laser Markers

MX-Z2000H-V1 Laser Marker

Product Guide

Overview

For manufacturers who have run into difficulties with printed labels, ink jet marking, dot peening or silk screening, Omron's advanced laser marking technology provides a better way to permanently apply durable, data-packed barcodes and human-readable information to parts and products.

With vision connectivity, the MX-Z2000H-V1 Series Laser Marker makes it possible to perform several tasks all at once, including product alignment, marking and verification of the mark produced. This reduces the number of operations, shortens cycle time and cuts equipment costs.

Applications

- Automotive parts
- Medical device
- Electronic components
- Industrial machinery and components
- Industrial tooling
- Consumer products

Primary Benefits

- Provides durable, high-resolution marking for advanced traceability
- Boosts flexibility by marking parts in any orientation
- Marks a wide variety of shapes and curved surfaces
- Performs orientation, marking and verification in a single step

Key features

- Laser marking in three axes
- 1D and 2D code marking
- Range of 0.1mm to 120mm height for individual characters
- MOPA (Master Oscillator Power Amplifier) for laser pulse control
- Fine detail and deep marking mode options
- Integrated vision for alignment and code verification
- Powerful integration with PLC or PC-based control systems

Laser Marker Product Selection

Model	MX-Z2000H-V1	MX-Z2050H-V1	MX-Z2055H-V1
Laser Type	1062nm Class 4, 20W	1062nm Class 4, 20W	1062nm Class 4, 20W
Marking Area	90mm x 90mm	160mm x 160mm	160mm x 160mm
Working Distance	170mm +/- 10mm	220mm +/- 10mm	220mm +/- 10mm
Marking Resolution	2 micron	4 micron	4 micron
Barcode Types	Code 39, Code 128, Databar, QR, Micro QR, DataMatrix (see data sheet)		
Fonts	OCR-A, OCR-B, True Type		
3 Shapes Marked	Cone, Sphere, Cylinder, Slope, Stepped		
Text Size	0.1mm – 120mm		
Communication Interface	RS-232, RS-422, Ethernet TCP/IP, EtherNet/IP, 20 pin input / 14 pin output		
Laser Head Detail	140mm x 230mm x 415mm, IP65, 0C – 40C operating temperature		
Vision System Option	Integrated Vision Based Laser Guidance and Marking Inspection		

Accessories

Type	Part #	Description
Safety Relay	G7SA-2A2B DC24	4 pole, DPST-NO, DPST-NC, EN 50205 Class A
Cable	MX-9301	Controller power supply cable
EE Mode	MX-9230	Energy Enhancement (EE) Mode activation key
Camera Controller	FH-2050	Vision System Controller, Super,Mid Spd CPU,Box 2-Cam
Camera	FH-SC04	Hi-Spd Camera 4Mpix Color
Camera Lens	3Z4S-LE SV-1614V	CCTV Lens 16mm
Camera Bracket	MX-9150	Vision Attachment MX-Z2000
	MX-9151	Vision Attachment MX-Z2050/55

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