

Laser Marker Selection Guide

FAYb LASER MARKER



NEW LP-ZV SERIES



LP-RV SERIES



LP-RF SERIES

CO₂ LASER MARKER



NEW LP-RH SERIES

Laser wavelength 100 380 400 500 /isible region 600 700 780 1.000 FAYb Laser 1,064 nm 1,070 nm Infrared region 10.000 CO₂ Laser 9,300 nm 10,600 nm Wavelength

FAYb LASER MARKER

NEW

3D FAYb Laser Marker













* Average output for marking

The built-in camera helps achieve higher productivity. Thanks to the 1-ns short-pulse laser's superb marking expressivity combined with the 3D

control, this series is suitable for high-output metal marking as well as for high contrast marking and extra small character marking on resins.



FAYb Laser Marker Short Pulse

P-RV SERIES









Equipped with a short-pulse laser, this series achieves excellent high contrast marking on resins and enables engraving of very small characters.



FAYb Laser Marker

P-RF SERIES











The head is durable with an IP64 ingress protection rating. This entry laser marker series features excellent basic functions.

CO₂ LASER MARKER



NEW

CO₂ Laser Marker

SERIES



*Average oscillator output

General-purpose CO₂ laser marker suitable for marking on resin Vertical and horizontal head models available for flexible installation on various equipment

Laser marker product information (our company's website)

• Detailed product information



Laser Marking Applications

FAYb Laser Marker



Engine block



Engine part



Cam shaft



Cast



Medical instruments



Battery housing



Laser diode



Bearing



Sensor



IC



Molded resin part



Molded resin part

CO₂ Laser Marker



PET bottle



Outer box (GS1 DataMatrix)



Aluminum packaging material





Molded resin parts



Connectors



Electronic parts



Circuit boards



Alumite nameplate



Laser labels (marking + half-cutting)



Silicone tube



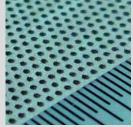
Lens

Laser Processing Applications

FAYb Laser Marker



Processing of bearing surface



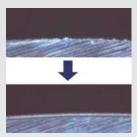
Depression processing on metal



Removal of coating film from gasket



Engraving on die



Deburring of metal parts



Removal of gold plating from electronic parts

CO₂ Laser Marker



Film cutting



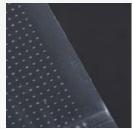
Resin gate cut



Removal of ribbon cable insulation



Rubber gaskets cutting



Film driling

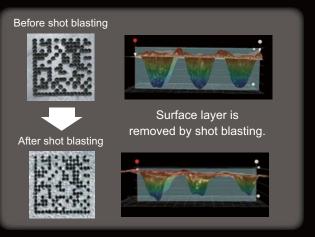


New application suggestion

Deep engraving using high-output laser marker

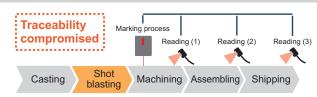
Traceability ensured even after shot blasting

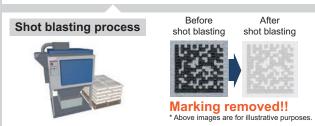




Previous issues

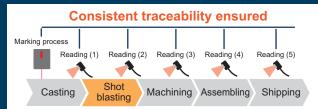
 Marking removed by shot blasting, so traceability is compromised.





After using the LP-ZV

Deep-engraved marking remains even after shot blasting to ensure consistent traceability!!





Material compatibility chart

●=Good ○=Usable △=Incompatible ×=Non-usable

Material		FAYb laser marker	CO ₂ laser marker	FAYb laser marker	
		LP-ZV series LP-RV series LP-RF series	LP-RH series	ABC	₩ ABC
Metal	Iron	•	×		
	Carbon steel	•	×	Stainless steel (SUS)	Steel
	Alloy steel	•	×	CONTRACTOR OF THE PARTY OF	-
	Copper, brass	•	×	ABC ABC	B BC
	Aluminum alloys	•	×		
	Magnesium alloys	•	×	Copper	Aluminum
	Titanium alloys	•	×		
	Nickel alloys	•	×	ABC	融 ABC
	Gold, silver	0	×		
Resin	ABS (Acrylonitrile butadiene styrene)	•	•	DO (M/I:4-)	DO (DIII)
	EP (Epoxy)	•	•	PC (White)	PC (Black)
	PA (Polyamide / nylon)	•	0	1900	1949
	PBT (Polybutylene terephthalate)	•	0	ABC	ABC
	PC (Polycarbonate)	•	0		A STATE OF THE STA
	PE (Polyethylene)	0	0	PMMA (Transparent)	PP (Black)
	PET (Polyethylene terephthalate)	0	•		100
	PF (Phenol)	•	•	ABC	ABC
	PMMA (Acrylic)	•	0		
	POM (Polyacetal)	•	0	PS (Black)	PS (White)
	PP (Polypropylene)	•	0	, ,	, ,
	PS (Polystyrene)	•	0	■ CO₂ laser marker	
	PU (Polyurethane)	•	0		
	PVC (Polyvinyl chloride)	0	•	ABC ABC	ABC ABC
	UF (Urea)	•	•		Mark
Others	Silicone resin	0	0	PVC (White)	Glass epoxy
	Ceramics	0	0	The second second	1/5/2005
	Wood	Δ	•	ABC ABC	ABC
	Paper	Δ	•	THE ADO	MAN YOU
	Glass	×	•	Enovy	Glass
	Rubber	•	•	Epoxy	GidSS

- * The above shows typical judgment results. Judgment results may differ when used on customers' workpieces.
- * We can check marking results using actual workpieces provided by your company. For details, please contact our sales office nearest you.

Laser marker installation process flow

Consultation



We suggest the best model based on your requirements.

Testing and reporting of test results



We report the test results by providing a test marking report and marked samples after testing with the actual laser marker.

3

Demonstration using actual equipment



We provide a demonstration to check that the marking quality and operation are in accordance with your request.

Discussion with the customer



We hold a meeting to discuss integration specifications and the communication between the laser marker and PLC.

Attendance during commissioning, explanation of operating procedures



In accordance with your request, we provide support to install machines and operate laser markers.

After-sales service



In accordance with your request, we offer on-site maintenance service and appropriate inspection service after your unit is swapped with a replacement unit.

Disclaimer

The applications described in the catalog are all intended for examples only. The purchase of our products described in the catalog shall not be regarded as granting of a license to use our products in the described applications. We do NOT warrant that we have obtained some intellectual properties, such as patent rights, with respect to such applications, or that the described applications may not infringe any intellectual property rights, such as patent rights, of a third party.



Panasonic Industry Co., Ltd.

Industrial Device Business Division 7-1-1, Morofuku, Daito-shi, Osaka 574-0044, Japan industrial.panasonic.com/ac/e/