Laser Marking + Engraving Solutions





FOBA V-Series

Compact power for precise and sustainable plastic marking

With their particularly **compact design**, the laser markers in the FOBA V-Series are among the smallest marking systems in their performance class on the market. However, it is not only the compact design, but also the **flexibility** of the systems is impressive across the board. The choice between **two writing head orientations** and the option of installing the laser head **horizontally** or **vertically** ensures **optimum integration** of the V-Series into any production line. It is also fully compatible with the FOBA M-Series laser marking machines.

With wavelengths in the **ultraviolet** or **green range**, the FOBA V-Series unfolds its full potential when marking plastics such as **HDPE**, **PE**, **PVC**, **PP** or even **PA66**. The laser markers deliver **clear**, **scratch- and abrasion-resistant**, **high-contrast markings**, making them particularly attractive for applications in electronics and automotive industries as well as medical technology. Materials such as silicone, acrylic, ceramic and epoxy can also be **precisely marked**, making the V-Series a **versatile solution** for various industries.

In addition to its outstanding marking quality, the V-Series offers **future-proof technology**. Compared to conventional marking technologies, such as Continuous InkJet (CIJ) or pad printing, the V-Series **requires hardly any consumables**. This makes it a sustainable solution that **minimizes waste** and **operating costs** and can **reduce the environmental footprint**.

Your product benefits

- → Compact design for easy line integration
- → **High power for more versatility** in marking a variety of plastics
- ightarrow Cost-efficient and sustainable alternative to other labelling methods
- → Full compatibility with the complete FOBA M-series
- → **Long lifetime** and therefore low TCO (Total Cost of Ownership)



Multicolored olefins, tubes for invasive use, medical bottles made of HDPE





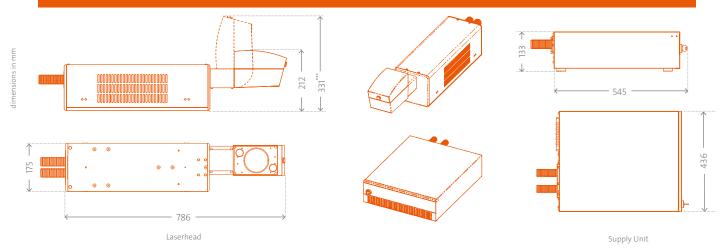


TECHNICAL DATA → V.0042-UV & V.0102-GN

Marking features	V.0042-uv	V.0102-gn
Laser type	4 Watt Nd:YVO4-Laser, wavelenght 355 nm (UV), laser class 4 (acc. to IEC 60825-1)	10 Watt Nd:YVO4-Laser, wavelength 532 nm (Green), laser class 4 (acc. to IEC 60825-1)
Marking head Lenses	CP-10 marking head f=103 mm/160 mm/210 mm 330 mm/580 mm	CP-10 marking head f=103 mm/160 mm/254 mm 410 mm/535 mm
Marking field sizes [mm]*	min. 48,5 x 48,5 (f=103, Software MarkUS) max. 353,7 x 353,7 (f=580, Software MarkUS)	min. 57,9 x 57,9 (f=100, Software MarkUS) max. 306 x 306 (f=535, Software MarkUS)
Marking speed*	Up to 15.000 mm/s or 1200 characters/s	
Pulse duration [ns]	5 - 35	
Repetition Rate [kHz]	40 - 150	
Software Interfaces	FOBA MarkUS, FOBA GO TCP/IP, Profibus, PROFINET, EtherCAT, EtherNetIP	
Supply		
Electrical requirements	L/N/PE 110 – 240 VAC, 50/60 Hz Typically 300 W	
IP rating Cooling	→ Marking unit IP20 → Supply unit IP20 Air-cooled	
Temperature Humidity	10 – 35°C (50 – 95°F), <80%, non-condensing	
Weight	→ Marking unit approx. 24 kg" → Supply unit approx. 13 kg	
Other options		

 \rightarrow Vision alignment system: Intelligent Mark Positioning (IMP) for the precise position detection of parts/to-be-processed areas and automatic alignment of marking/engraving/finishing | Laser pointer: Pre-projection of the marking content

Dimensioned Drawings \rightarrow V.0042-uv & V.0102-gn



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* depends on application ** without F-Theta lens *** straight- out variant