## Laser Marking + Engraving Solutions



# FOBA's Green Laser-Markers: "Cool" Technology for Stunning Marking Results

With the "green lasers" (532 nm wavelength), FOBA offers marking systems with low heat impact. The new vanadate laser sources are available with 7- or 14-watt laser power. Providing outstanding speed and accuracy, they mark substrates that do not show satisfactory marking results using other wavelengths. The materials affected include many white and transparent plastics, glass surfaces, highly reflective metals, or combined material parts.

Also red or orange plastic surfaces, which often only allow for poor marking contrasts due to existing color properties, obtain **perfectly legible codes and characters**. On **special plastics** such as UHMWPE, HDPE or PMMA, the marking quality achieved is impressive just as well. The green laser also makes **laser additives unnecessary** in most cases.

The FOBA V.0071-gr and FOBA V.0141-gr marking systems close the gap between UV (355 nm)and fiber (1,064 nm)-laser systems and address the **most challenging marking applications**.

## Your product benefits

- → 532 nm wavelength for low laser marking heat impact
- → 7 or 14 watt laser power for high application versatility
- → Outstanding marking speed in line and system
- $\rightarrow$  Filigree, high-contrast markings with high resolution for reliable legibility
- → Additive-free plastic marking
- → Safety and integrity even of sensitive and critical materials
- → Extended range of application in medical technology and automotive industry a. o.

FOBA

V.0071-gr

→ Long lifetime and therefore low TCO (Total Cost of Ownership) of the system



PEEK-implant, colored medical balloon catheter and transparent plastic tube









### Technical Data $\rightarrow$ V.0071-gr | V.0141-gr

Marking features	
Laser type	Pulsed Nd:YVO $_4$ laser (Vanadate), diode pumped, wavelength 532 nm, laser class 4 (acc. to IEC 60825-1)
Marking heads	MSIII with five focus lenses (f=100 mm/160 mm/240 mm/410 mm/ 535 mm)
Marking field sizes*	Five sizes between f = 100 mm (MarkUS 34.5 * 35.5 mm²   Foba Draw 39,9 * 68,6 mm²) and f = 535 mm (MarkUS 336,5 * 336,5 mm²   FobaDraw 392,1 * 392,1 mm²)
Marking speed <sup>*</sup>	Up to 6,000 mm/s or 700 characters/s
Line width	From 13 µm (depends on focusing optic)
Interfaces	TCP/IP, Profibus, PROFINET, EtherCAT, EtherNetIP
PC software	FOBA MarkUS, FOBA Draw or FOBA Go
Supply	
Electrical requirements	L/N/PE 110-240 VAC, 50/60 Hz
Power consumption	Typically 550 W
IP rating   Cooling	ightarrow Marking unit IP20 $ ightarrow$ Supply unit IP20   Air-cooled
Temperature   Humidity	<b>V.0071-gr:</b> 15 − 35°C (59 − 95 °F)   <b>V.0141-gr:</b> 15 − 30°C (59 − 86 °F) 90% (max. 20°C   68 °F ), 30% (max. 40 °C   104 °F ), non-condensing
Weight	$\rightarrow$ Marking unit approx. 25 kg <sup>*</sup> $\mid \rightarrow$ Supply unit approx. 20 kg
Other options	

→ 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

ightarrow Laser pointer

#### Dimensioned Drawings $\rightarrow$ V.0071-gr | V.0141-gr



ALLTEC Angewandte Laserlicht Technologie GmbH FOBA Laser Marking + Engraving An der Trave 27-31 23923 Selmsdorf | Germany T + 49 38823 55-0 | T (US) +1 630 694-3243 info@fobalaser.com | www.fobalaser.com