### Laser Marking + Engraving Solutions



FOBA V.0020-uv



## **FOBA V.0020-uv**

# UV laser marker for high-contrast marks on highly sensitive products

FOBA's V.0020-uv marking laser achieves high-contrast marks on sensitive materials using an ultraviolet wavelength. Because the material's surface is photo-chemically altered, very little heat is transferred to the material and it remains virtually undamaged and unchanged. Products made from highly sensitive or unique materials such as aircraft cables, translucent or colored tubes for various industries, medical plastics for invasive applications, flame-resistant plastics for electronic housings and even glass can be marked safely with high resolution and contrast.

Through the photo-chemical effect, the FOBA V.0020-uv creates a contrasting and permanent color change on the surface of the processed product instead of disrupting or displacing the material allowing the product itself to remain undamaged. Laser marks that are resistant to typical sterilization processes can now be achieved on medical devices, such as catheters or insulin pumps, and filigree and brilliant laser marks can be applied on glass. With the V.0020-uv, even silicones or white polyamides can now be laser marked. Marking highly sensitive and previously unmarkable materials without damage makes FOBA's UV laser marker an industry pioneer.



- → Safety and integrity for sensitive and critical materials
- → **Hygiene and sterility** for UV laser marked medical plastics
- → Filigree and high-contrast markings with high resolution
- → Solvent-free and additive-free marking of plastics
- → **Economical and low-maintenance** with efficient air-cooling and long-lasting optical components



Cable with color change
Tube for invasive use with laser
mark that can be sterilized
Charger with color change and
UDI code





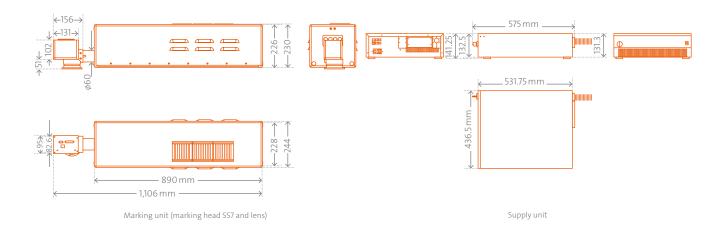


### TECHNICAL DATA → V.0020-UV

Marking features	
Marking heads	SS10 and SS7 with four focus lenses (f=103 mm/160 mm/214 mm/511 mm)
Marking fields*	From 64 x 76 mm <sup>2</sup> (SS10, f = 103 mm) to 375 x 375 mm <sup>2</sup> (SS10 / SS7, f = 511 mm)
Marking speed*	Up to 5,000 mm/s or 500 characters/s
Line width	From 10 µm (depends on focusing optic)
Laser $\rightarrow$ Pulsed Nd:YVO <sub>4</sub> laser (Vanadate), diode pumped, wavelength 355 nm, Laser class 4 (acc. to IEC 60825-1)	
User interfaces	
PC software	FOBA MarkUS or FOBA Draw (on separate, external, optional Windows 7 PC)
Interfaces	Ethernet interface
Supply	
Electrical requirements	L/N/PE 100 – 240 VAC, 50/60 Hz
Power consumption	Typically 400 W
IP rating   Colling	→ Marking unit IP20 → Supply unit IP21   Air-cooled
Temperature   Humidity	15-40°C   90% (max. 20°C), 30% (max. 40°C), non-condensing
Weight	→ Marking unit approx. 25 kg → 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
- → Laser pointer
- → Interface: Profibus, PROFINET, EtherCAT\* (\*with MarkUS 2.12)

#### DIMENSIONED DRAWINGS → V.0020-UV



ALLTEC Angewandte Laserlicht Technologie GmbH
An der Trave 27-31
23923 Selmsdorf | Germany
T + 49 38823 55-0 | T (US) +1 630 694-3243
F + 49 38823 55-222
info@fobalaser.com | www.fobalaser.com



