## Laser Marking + Engraving Solutions





## 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, flameresistant 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 without breakage. With the V.0020-uv, even silicones or white polyamides can now be laser marked. Marking highly sensitive and previously un-markable materials without damage makes FOBA's UV laser marker an industry pioneer.

## Your product benefits

- → Safety and integrity for sensitive and critical materials
- ightarrow Hygiene and sterility for UV laser marked medical plastics
- ightarrow 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







Dispenser with color change Cannula for invasive use with laser mark that can be sterilized Relay housing with color change





## FOBA V.0020-uv Technical Data

Marking features Marking heads Marking fields <sup>•</sup> Marking speed <sup>•</sup> Line width	TS10 and SS7 with four focus lenses (f=103 mm/160 mm/214 mm/511 mm) From $64 \times 76$ mm <sup>2</sup> (TS10, f=103 mm) to $375 \times 375$ mm <sup>2</sup> (TS10/SS7, f=511 mm) Up to 5,000 mm/s or 500 characters/s From 10 µm (depends on focusing optic)	←156→ ←131→ 50 50 50 50 50 50 50 50 50 50
<mark>Laser</mark> Type Laser class	Pulsed Nd:YVO <sub>4</sub> laser (Vanadate), diode pumped, wavelength 355 nm 4 (according to DIN EN 60825-1)	50° m → 1,106 mm → 1
User interfaces PC software Interfaces	FOBA MarkUS or FOBA Draw (on separ- ate, external, optional Windows 7 PC) Ethernet interface	جــــــــــــــــــــــــــــــــــــ
Supply Electrical req. Power consumption IP rating Cooling Temperature Humidity Weight	L/N/PE 100 – 240 VAC, 50/60 Hz Typically 400 W $\rightarrow$ Marking unit IP20 $\rightarrow$ Supply unit IP21 Air-cooled 15–40 °C 90% (max. 20 °C), 30% (max. 40 °C) non-condensing $\rightarrow$ Marking unit approx. 25 kg <sup>**</sup> , $\rightarrow$ Supply unit approx. 20 kg	531.75 mm
Other options Vision alignment system	Intelligent Mark Positioning (IMP) for the precise position detection of parts/to-be- processed areas and automatic align- ment of marking/engraving/finishing	

Interface

Laser pointer

Profibus

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