

# FOBA®

Laser Marking + Engraving

A Virtek Company

## Laser systems for marking and engraving



In the field of Nd:YAG lasers, FOBA supplies basic systems with a power range of 10 to 100 Watts. Basic systems are suitable for universal use in machine workplaces, manufacturing lines or special machines.

The innovative pulsed fibre lasers offer unprecedented efficiency and compactness. The small dimensions of the laser head, deflector unit and supply unit make integration much easier in, for example, small machines. The high level of pulse-to-pulse stability during material processing is a further advantage of this new type of light source.

- Small compact air-cooled laser
- Output power 19 Watt (CW)
- Excellent laser beam quality
- Single-phase mains connection
- No external cooling water
- Long working life of the laser diodes means little servicing



### Area of application



Marking on almost all materials, mainly marking on plastics, foil, metal parts and electronic components.

## DP20F

Basic system - 19 Watt

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Basic system - 19 Watt

## System

Marking field	110 x 110 mm <sup>2</sup> (f=160 mm)
Marking speed	up to 5000 mm/s up to 500 characters/s
Line width	70 µm

## Laser

Laser type	Pulsed Yb Fiber Laser, 1060 -1070 nm, diode pumped
Power (QS)	typical 19 W (20 kHz)
Power stability	+/- 1 %
Pulse frequency	20 - 80 kHz
Pulse energy	0,95 mJ (20 kHz)
Pulse width	100 ns (20 kHz)
Laser safety	Laser class 4
Output fiber cable length	2 m

## Control

PC	CompactPCI-PC
Operating system	MS Windows® 2000
Laser control	FOBAGRAF with Import functions of plt/dwg/dxf/ai/jpg/tif/pcx/bmp u.a.
Interfaces	serial, digital I/O, Ethernet, USB optionally: PROFIBUS

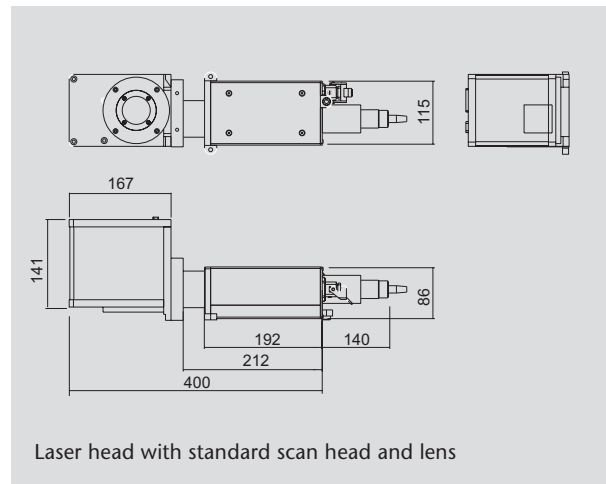
## Installation

Electrical	L/N/PE, AC 100 - 138 V, 187 - 240 V, adjustable, 50/60 Hz
Power consumption	typ. 550 W
Cooling system	forced air
Temperature	15 - 40 °C
Humidity	90 % (up to max. 20 °C) 30 % (up to max. 40 °C) non-condensing
Weight	Laser head approx. 5 kg <sup>1)</sup> OEM-Components approx. 30 kg cabinet approx. 45 kg <sup>2)</sup>
Degree of protection	IP 43 (cabinet)

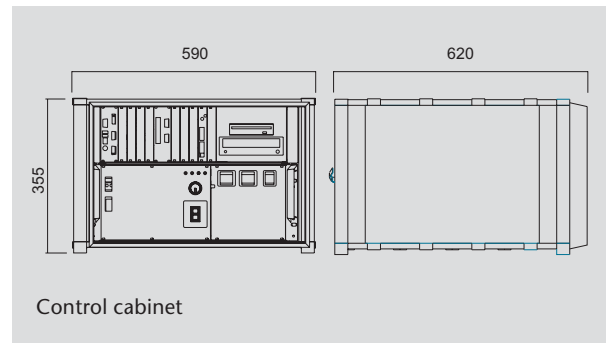
## Options

Pointer	Adjustment aid
Scan heads	
Scan lens	
Cabinet	Dimension: 19", 7 HE

<sup>1)</sup> without F-Theta lens  
<sup>2)</sup> with OEM-Components



Laser head with standard scan head and lens



Control cabinet

End to end excellence in laser systems

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