Laser Marking + Engraving Solutions





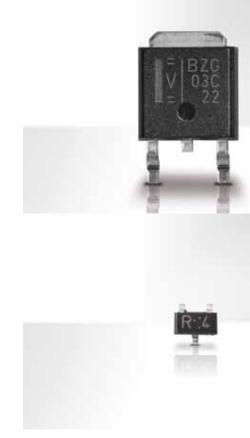
Small-sized marking laser for challenging tasks in the electronic industry

Most notably, FOBA C.0100 is small, short and compact: Just tailor-made for the manufacture of electronic components and devices in the electronic industry where space is often scarce.

C.0100 applies microscopic and fine laser marks on equally tiny components: Immediately, in zero-tolerance quality and anytime traceable – just as requested within the industry. FOBA C.0100 applies complex, variable data both on moving and static products and is therefore first choice for the application of permanent marks on electronic devices and boards.

Your product benefits

- → Small, short, compact: One-box design, shortest unit on the market
- → Easy to integrate: Compact design, flexible software/interfacing concept, multilingual user interface, two beam exit versions
- → Main fields of application: Electronic industry (laser marking of boards and electronic devices: transistors, diodes, small ICs)



Microchip (IC) components On top: epoxy resin, 6 x 6 mm marking field, marking time 45 ms

Below: epoxy resin, 2x1mm marking field, marking time 10 ms



The integration concept The small and compact all-in-one solution

FOBA C.0100 is that small and short that it can easily be carried under one's arm: Best prerequisites for the fast and smooth integration into tight production lines and electronic test and handling machines.

handling systems

conventional systems

 \rightarrow Smart system components: focus finder for

adjustment of working distance



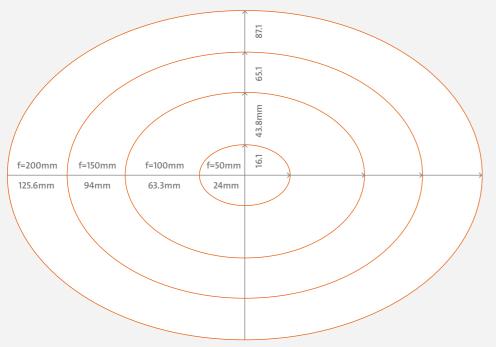
Mounting screws on all sides of the laser mar- \rightarrow Shortest, most compact unit on the market king system allow for a trouble-free horizontal \rightarrow One-box design: easy and fast installation or vertical assembly. The beam can either exit \rightarrow Optimal suited for integration into test and the system in 0° or 90° direction so that a flexible integration is guaranteed anytime.

With regard to the software, the laser's script- \rightarrow 30% larger working distances compared to ing interface with Ethernet and RS232 interface ensures seamless integration even into complex production lines.

Front view with straight beam exit (0°)

The marking fields

Four focusing lenses for various applications



4 focusing lenses				
Working distance (mm)				
89	80	128	179	
f=mm				
50	100	150	200	
50 mm focus lens for small line widths				

Marking fields, actual size

The software concept

Versatile, powerful, reliable: FOBA Draw

The intuitive and powerful graphical user interface FOBA Draw ensures user-friendly and flexible operation. FOBA Draw allows for the creation and editing of various laser marking jobs with a variety of available marking formats.

Communication

Ethernet (TCP/IP, 100Mbit LAN), RS232, digital I/Os

Inputs for encoders and product detector triggers

I/Os for the signals "start, stop, error, job select (32 different jobs with acknowledge), trigger, encoder; ready to mark, marking, shutter closed" and machine/user interlocks

Customer-specific solutions

FOBA Draw Com

ActiveX software interface for integration into operation software

For ultimate flexibility Various marking formats

- \rightarrow Multiple language fonts
- → Machine-readable codes (2D and bar codes)
- \rightarrow Graphics/graphic components, logos, symbols, etc. (the most common formats can be imported)
- \rightarrow Grayscale images and contents
- \rightarrow Complex fillings (hatch, contour and meander)
- \rightarrow Linear, circular and angular text marking; ring writing, rotation, reflection, expansion, compression, horizontal and vertical stretching of marking contents and texts
- \rightarrow Sequence and serial numbering; automatic date, layer, time coding, real-time clock; online coding of individual data

Graphics-orientated user interface under Windows® XP/ Vista for the intuitive and fast preparation of complete marking jobs on PCs

System configuration

Text/data/graphics/parameter editor

Configurable in 20 languages, e.g. in German, English, Japanese, Chinese

Easy access to standard CAD and graphic programs thanks to import functions for the most important file formats (DXF, JPG, AI, etc.)

WYSIWYG

Various password-protected security levels

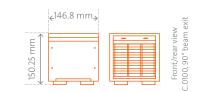


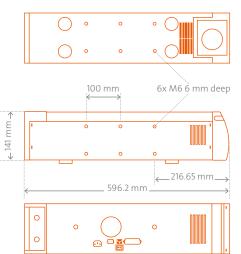


FOBA C.0100 Technical Data

Components of the marking system

	0.7
Standard configuration	ightarrow Marking unit
	Includes laser, digital high-speed galvanometer
	scanners, one lens with lens protection, controller,
	I/O panel, built-in keypad, power supply, connect-
	ors, lamps, switches, focus finder for adjustment of
	working distance
	ightarrow Beam exit straight (0°) or 90°
	ightarrow Marking software FOBA Draw
Laser	Sealed CO ₂ laser, power class 10 W, central emission
	wavelength 10.6 µm, 4 focusing lenses
Laser class	4 (according to DIN EN 60825-1:2008-05)
Languages	English, French, German, Italian, Spanish, Portuguese,
	Chinese
Options	\rightarrow Beam shield
-	\rightarrow Exhaust unit
	\rightarrow Product detector
	\rightarrow Pilot laser
	\rightarrow PC or laptop
	, ii







Integrated keypad	ightarrow Start and stop keys
	ightarrow LED indicators for status, laser emission, error
Marking software	FOBA Draw (configurable in 20 languages, part of
	standard delivery)
Software interfaces	Ethernet (TCP/IP, 100Mbit LAN), RS232, digital I/Os

Supply

Electrical requirements 100–120V, 200–240V, Autorange			
1PH, 350 VA, 50/60 Hz			
Internally air-cooled			
5–35°C			
10–90%, non-condensing			
IP30			
Marking unit approx. 12.5 kg			



Your local agency

