

# REA JET

INDUSTRIAL CODING AND  
MARKING SOLUTIONS -  
MADE IN GERMANY

## REA JET Fiber Laser FL Tamper-Proof Marking with Light



# Innovative Marking and Coding Solutions for Industry



Industrial marking with Fiber Laser systems from REAJET offers a distinct advantage: it is consumable and virtually maintenance-free, i.e. it involves low operating costs. Working with the REAJET FL Fiber Laser Marking System is simple and intuitive. It has a graphical operating panel, using a modern rotary knob with push-button function.

Unique in the world is just one overall operating concept, used for both the REAJET laser and the REAJET ink-jet systems, using a single set of interfaces! Parallel user interfaces therefore enable your operating personnel to take charge of several methods of marking. And that will save you both money and time.

The compact design and the easy to rotate marking head of the REAJET FL allow for simple mechanical integration. Included in delivery is a pilot laser that ensures the system is swiftly set up for operation with new products. New Generation digital beam deflecting mirrors provide for the highest possible operating speed, but with enough capability in reserve.

Operation of, or training on, the REAJET FL, using a PC – as well as remote maintenance by PC – is made possible by means of its integrated VNC server. No matter where you are, by means of the integrated web server you are able to control your REAJET marking system from any web browser available; there is no need to install further software. The remote maintenance tool for remote diagnostics and support is included in delivery.

## Possible applications of the REAJET FL are

- engraving and annealing metals
- colour inscription of untreated and with additives doped plastics
- day and night design
- coated substrates

## Advantages of Fiber Laser: REAJET FL

- newest compact lens technology
- single overall operating concept, for both laser and ink-jet marking
- easy-to-learn and intuitive operation (graphical user interface)
- integrated VNC server and web server, for remote diagnostics and maintenance
- clear presentation of laser parameters with guided input and result preview
- Pilot laser included in delivery
- easy integration, due to compact design
- digital beam deflecting mirrors, allowing highest possible operating speed
- Ethernet communication with unique communication protocols for both laser and inkjet systems



FL Controller Unit



FL Operating Terminal



FL Laser Unit

## Technical Specifications

FL Laser Unit	FL 10	FL 20	FL 30	FL 50
Laser Type	Diode-pumped, air-cooled, pulsed Fiber Laser with integrated Pilot Laser			
Laser Power	10 W	20 W	30 W	50 W
Pulse energy	1 mJ			
Optimum pulse energy	10 kHz	20 kHz	30 kHz	50 kHz
Variable pulse frequency	2 kHz - 200 kHz			
Pulse length / Wave length	100 ns / 1064 nm			
Beam quality	M <sup>2</sup> - 2.0 (optimized for marking)			
Focusing Lens	FL 100	FL160	FL 255	
• Distance to product* / Marking area (L x H)	98 mm / 65 x 65 mm**	176 mm / 110 x 110 mm**	292 mm / 180 x 180 mm**	
Mirror control	Digital, giving highest marking speed			
Dimensions (L x W x H)	420 x 70 x 82 mm			
Weight	1.5 to 2.5 kg (depending on focusing lense)			
Laser class	4 (DIN EN 60825-1/2008)			

\* distance between focusing lens and product surface

\*\* unlimited marking length with moving products

FL Operating Terminal	FL 10	FL 20	FL 30	FL 50
Display	5.7 inch, high-resolution graphics display, 6 LEDs for direct display of status			
User Interface	Intuitive operation via keypad and rotary knob with push-button function			
Languages	To be freely chosen			
Dimensions (W x D x H)	302 x 230 x 66 mm			
Weight	2.7 kg			

FL Controller Unit	FL 10	FL 20	FL 30	FL 50
Communication	Ethernet, USB			
Digital I/Os	2x 6 Inputs, 2x 4 Outputs - freely configurable			
Accessories	Extraction Units, Encoders, I/O-Kits, Product Sensors, Safety Kits, Signal Lights			
Safety	Interlock (Dual-channel safety circuit)			
Ambient conditions	5 - 40 °C, humidity 5 - 85 % not condensed			
Stromversorgung	95 - 250 V AC (Autorange) 50/60 Hz			
Dimensions (W x D x T)	160 x 580 x 400 mm (umbilical between laser unit and controller unit: 3 m)			
Weight	21 kg			

## Object-oriented Layout Software (Windows® based) REA JET Label Creator

Marking Content

- Text-Objects optional with multiple contents and word wrap
- dynamic textfields (Date, Shift, Time, Counter, Reference, buffered Text-Objects)
- Linear-, Circle-, Oval- and Cornermarking etc.
- Logo, numerous 1D + 2D-Codes incl. input wizard for GS1 and other standards

- True Type fonts incl. laser-optimized fonts
- Object-related assignment of marking parameters
- User defined object selection for Pilot laser
- User defined marking order at a standstill and optimized marking order „on the fly“



Marking of plastic parts



Marking of metal parts



Marking of medical instruments

# REA JET



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