

LS

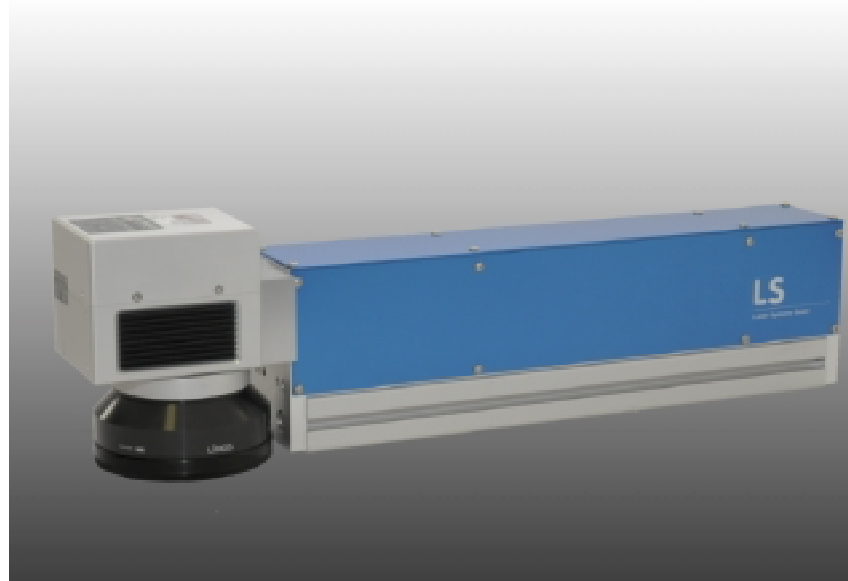
Laser Systems GmbH

OEM fiber laser marker

LS-FL12/20/30 automates and rationalises your marking application. You mark fast, flexible, durable and economic even small batches.

LS-FL12/20/30 - marking with advantage

- non-contact, forceless process
- durable marking
- unforgeable
- marks at difficult accessible places
- high flexibility
- simple integration to process lines
- economic
- maintenance-free over thousands of hours



LS-FL12/20/30 is an oem marker where laser unit and galvano-meter beam deflection are fix mounted on a profile rail. Laser and beam expansion are covered by a metal housing.

LS-FL12/20/30 oem markers are designed for a simple vertical and horizontal integration within process lines and system housings. For assembly the laser is mounted on a mounting plate with ITEM-profile. Personal Computer, laser power supply and system power supply are embedded within a IP54-cabinet.

LS-FL12/20/30 corresponds according DIN EN 60825/VDE 0837 resp. VGB 93 **Laser safety class 4.**

Quality

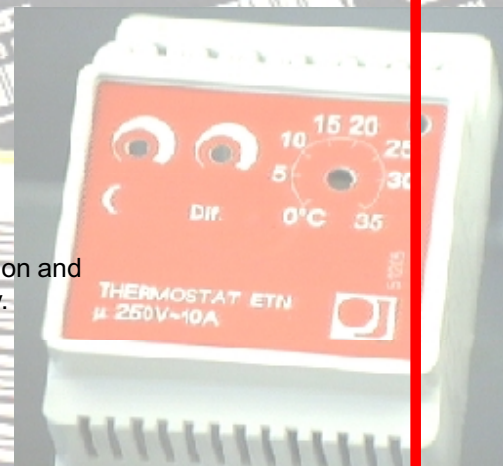
Made in Germany, Research, development, production, application and service in one company guarantee optimised support and quality.

Experience

Decades of know-how in laser technology.

Advice

Our application lab waits for your process studies and tests.



Technical Data

Software	Control (Hardware)
<p>Surface: process control in flowchart-logic program run in real-time or single step configurable display function</p> <p>Functions: free scalable any angle fill- and hatching algorithms wide marking graphics barcodes</p> <p>Graphics: import of DXF-data import of HP-GL import of pixel graphics own produced logos and graphics</p> <p>Barcodes: code 39 code 128 2/5 interleaved datamatrix ECC200 EAN 8/13 PDF 417</p> <p>Special fonts: True Type OCR dot-matrix Unicode characters approbation signs</p> <p>Variables: alphanumeric integer floating point free choose of variable names different I/O possibilities serial numbers, even alphanumeric save and load database connection via ODBC</p> <p>Control: While-loops For-loops case differentiation manual data input</p>	<p>RS232-interface parallel interface I/O-ports network (optional) CAN-bus (optional) Barcode reader-input image processing (optional)</p>

Marking features

beam deflection by galvanometer mirrors
marking speed up to 500 characters/s^a
marking field up to 220 x 220 mm² ^b
marking on-the-fly

Laser specifications

	LS-FL12	LS-FL20	LS-FL30
laser type	LS-FL12	LS-FL20	LS-FL30
laser medium	fiber	fiber	fiber
stimulation	diodes	diodes	diodes
wave length [nm]	1064	1064	1064
beam diameter [mm]	1.2	1.2	1.2
laser power (cw) [W]	max 12	max 20	max 30
pulse energy [mJ]	0.6	0.75	1.0
M ²	< 2.0	< 2.0	< 3.2
pulse frequency [kHz]	1 ... 500	1 ... 500	1 ... 500
cooling	air	air	air

Specifications power supply

power connection	110/230 V AC ±10%
power consumption	< 0.6 kW, depending on laser power
dimension	19" drawer height 4 RU
ambient temperature	0° - 50°C



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a) max. speed, depending on application

b) Field size, depending on focusing optics