

Linx FSL20 and Linx FSL50

Fibre laser marking systems

The Linx FSL20 and FSL50 fibre laser coders deliver precision marking for complete traceability onto a wide range of materials.

Designed for simple integration into both moving and static applications, they also deliver reduced downtime and costs due to their low maintenance and long laser source of over 100,000 hours.

Easy to integrate into production

- Compact design and flexible laser head - easy integration into OEM machines, and both static or moving workflows
- Small marking head and supply unit enables fast integration maximising uptime
- Two beam orientation options: standard or with a Beam Turning Unit for 90° rotation – for coding in any orientation
- Air-cooled lasers which can be placed where they are needed, and not near factory air source or a bulky water-cooled system.

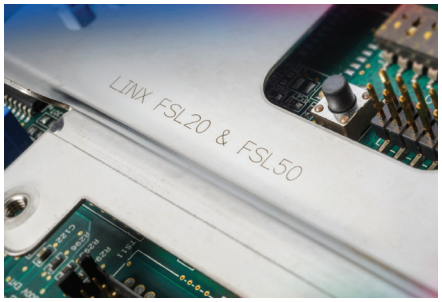
Complete traceability – on more materials

- Linx FSL20 and FSL50 fibre lasers produce permanent codes on a wide range of materials, including metal, plastics and packaging foils
- Extremely fine spot size and well-refined beam quality produces consistently high-quality codes – ideal for marking smaller products, promotional codes or anti-counterfeiting, or large amounts of information into small areas
- Unrestricted coding applications mark a range of fonts, codes and graphics over multiple lines – meeting your coding needs now and in the future
- Choice of four lenses to match the right code to the right product, without compromising on code quality or speed
- Choice of power FSL20 (20W) or FSL50 (50W) models
- The steered beam fibre laser technology can code at high speeds – ideal for coding onto a wide range of line speeds and substrates.

Low maintenance for less downtime

- Built for reliability – the laser source lasts more than 100,000 hours
- IP54-rated so marking heads can be used in a wide range of environments
- Air-cooled for extra energy efficiency, with none of the leaks or extra maintenance associated with water-cooled lasers
- LinxDraw software included – message creation is quick and easy, saving time on product setup and changeovers.







Linx FSL20 and Linx FSL50

FSL50 LASER MARKING UNIT



SUPPLY UNIT



Four focussing lenses for a wider range of working distances

Focal length			
100	163	254	420
Working Distance (mm)			
129	219	350	543
Max Width (mm)			
84.65	142.24	221.66	366.52
Max Height (mm)			
107.40	181.86	267.81	498.47

Technical Specifications

LASER DETAILS

- Laser type: Ytterbium (Yb) pulsed fibre laser
- Laser class: 4 (IV) (acc. to DIN EN 60825-1:2008-05)
- Nominal laser output: 20W and 50W
- Laser wavelength: Central emission wavelength – 1064nm (min: 1055nm, max: 1075nm)
- Laser tube warranty: 2 years
- Laser source life expectancy: > 100,000 hours

PERFORMANCE

- Marking speed: 1 to 6,000 mm/s (typical)
- No of lines of text: Only limited by character size and marking field
- Character height: Up to marking field
- Print rotation: 0-360 degrees
- Operation mode: pulsed (Q switch)

PHYSICAL CHARACTERISTICS

- Material: Painted sheet metal housing
- Weight – marking unit/supply unit: 8kg / 19kg
- Laser head protection class: IP54
- Conduit length: 2.7m
- Minimum bend radius of conduit: 60 mm
- Head mounting options: 90-degree (standard) and straight-out (option)
- Cooling system: Air cooled with automatic overheat detection
- Supply voltage / frequency: Auto selection range 100 to 240 V / 50/60 Hz (auto range)
- Maximum power consumption: 500 VA
- Operating temperature range: 10 - 40° C ambient
- Humidity range: 10% to 90% relative humidity, non-condensing

LINXDRAW SOFTWARE

- Graphics-orientated user interface for intuitive and fast preparation of complete code templates on PCs
- Text/data/graphics/editor
- Easy access to standard CAD and graphic programs via import functions
- WYSIWYG
- Password protected security levels

MARKING FORMATS

- Standard fonts (Windows® TrueType®/TTF; PostScript®/PFA, PFB; OpenType®/OTF)
- Individual fonts such as high-speed or OCR
- Machine-readable codes:
  Bar codes: BC25,BC25I, BC39, BC93, EAN 8, EAN 13, BC128, EAN 128, Postnet, SCC14, UPC_A, UPC_E, RSS14TR, RSS14ST, RSS14STO, RSSLIM, RSSEXP
  Data matrix 2D codes: ECCOOO, ECC050, ECC080, ECC100, ECC140, ECC200, ECC PLAIN, QR
- Graphics/graphic components, logos, symbols, etc. (the most common file formats such as DXF, JPG, AI can be imported)
- Linear, circular, angular text marking; rotation, reflection, expansion, compression of marking contents
- Sequence and serial numbering; automatic date, layer, time coding, real-time clock; online coding of individual data (weight, contents, etc.)

LANGUAGE CAPABILITIES – LINX (DRAW UI)

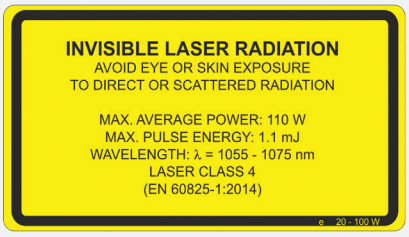
- Arabic, Czech, Danish, Dutch, English, Finnish, French, German, Italian, Japanese, Korean, Lithuanian, Norwegian, Polish, Portuguese, Romanian, Russian, Simplified Chinese, Slovak, Spanish, Swedish, Thai, Traditional Chinese, Turkish, Ukranian

EXTERNAL INTERFACES

- Encoder inputs: Dual channel, 24 V, hard wire. CHA; CHB; Index
- Product sensor input: Single, PNP only. 24 V, hard wire
- Ethernet (to PC): RJ45 connector (100 Mb/s)
- Customer interface: Input and output signals are 0 V or +24 V
- Input signals: Start Marking; Stop Marking; Shutdown; Shutter Lock; External Interlock; Exhaust error; Error Confirm; Filter Full; Error Status Customer; Job Select (8-bit parallel inputs); External Event (job selection strobe)
- Output signals: Ready to Mark; Laser Ready; Marking; Shutter Closed; Exhaust On; Error; Bad; Good; PC Connected; Acknowledge (confirms successful job selection)
- Bi-directional signals: RS-232 (TXD, RXD, CTS, RTS)
- Mains power connection: IEC mains cable socket allowing changeable country-specific cable and plugs
- Control: LinxDraw® software

REGULATORY APPROVALS

- CE



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