

# Technical specifications

# JET3

## Print performance/functions

- Printing speed up to 6.6 m/s (10 cpi)
- Printing height 0.8 to 16 mm, depending on nozzle size and head type
- Country and industry-specific fonts, Arabic, Cyrillic, Chinese, Persian
- Fonts: from 5x5 to 32x24, special fonts, user-programmable fonts, tower printing
- Multi-line fonts (1 to 5 lines)
- Fonts and graphics can be positioned and combined in the print jobs as desired
- Proportional function for all fonts
- Font height and font width adjustable
- All major barcodes and data matrix codes (ECC200), GS1 Data Matrix (EAN/ECC)
- Time, auto-adjustable date, auto-adjustable expiration date, weekdays, calendar weeks, Julian calendar, shift identification
- Replacements: all date, time and counter functions can be replaced and user-programmed
- 10 individually programmable counters, consecutive numbering, production counter, meter marking with "Meter Go" function
- User-programmable graphics/logos can be created in the integrated editor
- Multistage contrast and bold function, print repetition, print delay, backward print, rotation/mirroring of font, inverse, reverse and alternating prints (object-related)
- Dynamic backward printing, for traversing lines
- Programmable batch production and interlinking of multiple jobs
- "External text" function
- Variable text (database application)
- Stop function after reaching preselected amount

## Data administration/security

- Data buffer in case of power failure
- Explorer
- Print jobs saved with printing data and machine parameters
- Data logging
- Up and download of jobs and graphics using USB stick
- Storage capacity: SD-Card, can be expanded as desired
- Job select (1024 jobs selectable from external source)

## Operation/data input

- 10.4" colour TFT touch-screen display (SVGA)
- Creating and editing jobs during production
- Available menu languages, depending on language package: English, German, Chinese, Arabic, etc. Optionally, other languages can be established.
- Integrated font editor
- Integrated graphic editor
- Alternative control using the data interface (serial or Ethernet)
- Country-specific on-screen key pad
- Operation also by mouse or key board
- Comprehensive self-diagnosis and status display with easy-to-understand text, help function, printer status display ("traffic lights")
- Storage of numerous jobs and graphics (storage extension via SD-Card)
- Password function and service menu
- Windows-based interface, WYSIWYG, real-time updating of display

## Interfaces, inputs/outputs

- Product detector PNP/NPN 24V
- Shaft encoder input for printing speed synchronisation (TTL 5V, HTL 24V, RS422, 5V)
- Digital inputs/outputs user-selectable, 6 inputs, 8 outputs
- Printer alarm, low fluid, print ready, print finished, external job selection etc.
- Serial interface (V24/RS 232) up to 115200 baud
- USB port
- Ethernet (industry standard M12D)
- Remote maintenance via RS232

## LEIBINGER hydraulic system

- Low maintenance, diaphragm pumps with optimised on-time
- Fully automatic viscosity and pressure control
- Thermally isolated hydraulics
- No external supply of compressed air is required
- Automatic interval function

## Print head

- Flexible umbilical, length 3 m, 6 or 10 m (optional)
- Stainless steel body
- Fully automatic nozzle and gutter seal
- Fully automatic drop charging, drop break off and ink-jet control
- Nozzle size model JET3 and JET3pro: 50, 60, 70 µm. Model JET3pi: 60 and 70 µm. Model JET3mi: 40µm.
- upside down - 360° assembly
- Safety switch for print head locking
- Options: Head ventilation, 90° bent umbilical

## Fluid reservoirs

- Capacity of the pressureless ink and solvent tanks is 1.3 litre.
- Refillable while printing
- Automatic level control

## Inks

- Ink consumption: up to 130 million characters/ltr. (matrix 7x5/nozzle 50µm)
- Several dye-based inks and soft pigmented inks
- Fast drying inks (<1sec)
- MEK, ketone-free, alcoholbased inks
- Pigmented contrast inks (JET3pi)
- Ink colours (black, yellow, red, orange, white, blue, green, silver)
- Temperature and transfer-resistant inks
- Security, colour changing, sterilisation, adhesive and alcohol resistant inks
- Food-grade ink and food packaging inks
- Customised inks

## Cabinet, dimensions and weights:

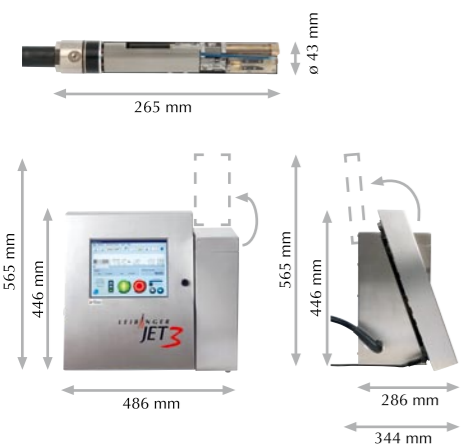
- Weight print head: 1.5 kg
- Weight cabinet: 20.5 kg
- Protection class: IP54, for model JET3pro IP 65

## Supplies and environmental conditions

- 100 V-240 V, 50-60 Hz, max. 40 VA
- Temperature range +5°C to +45°C
- Relative humidity max. 90%, non-condensing
- No external air pressure necessary

## Accessories

- Product detector, shaft encoders, printer stand, print head bracket, alarm lamps
- Software for remote control, multi-head control and specific industries



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With automatic nozzle seal

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Ink-Jet Printer

# LEIBINGER

# Reliability in perfection

# JET3

## Easy handling

The Windows-based interface allows intuitive handling of the printer. The great variety of functions are clearly shown on the 10.4" touch display.

## Highest availability

State-of-the-art technology such as the LEIBINGER nozzle seal and the hydraulics design without permanently operated pressure pumps lead to minimum service and highest availability.

## Flexible integration

Numerous interfaces on the back of the printer make the integration of the printer very easy. The JET3 offers, for example, connections for USB, Ethernet and digital I/O.



## Reliability

The use of high quality components, the automatic control as well as the monitoring of all parameters such as ink pressure, drop break-off point and viscosity guarantee highest reliability. Quality "made in Germany".

## Efficiency

The minimal use of ink, solvent and energy as well as minimum maintenance provide highest efficiency.

## Automatic nozzle seal

Nozzle and gutter tube close airtight. This prevents drying of ink in the print head. Even after a long-term shut-down of the printer, an instant start without cleaning is guaranteed.



Innovation and quality to an extremely high degree-attributes which LEIBINGER stands for in the area of industrial inkjet technology. The printers made in Germany with the well-established LEIBINGER logo prove their reliability and capacity daily.

The applications are, for example, "best before" dates or lot numbers on packages, data matrix codes in the pharmaceuticals and automotive industries as well as printing on cable with white pigmented contrast inks. Solvent inks are already wipe-proof after one second and suitable for materials like glass, plastics or metal.

Printing uses Continuous Inkjet technology for fast, non-contact marking. Several conceivable forms of surfaces, such as flat, concave, convex and structured, can be printed on. Even for bigger distances between print head and product, a consistently good print quality can be guaranteed.

Easy handling is a basic requirement for smooth production. The LEIBINGER JET3 offers intuitive and comfortable operation with Windows CE technology on a 10.4" colour TFT touch display. Large keys, menu navigation in different languages as well as many special functions like graphic and font editor make the handling very easy. The newly developed refill system guarantees clean and splash-free re-filling.

Highest availability is guaranteed by the automatic LEIBINGER nozzle seal which closes the nozzle and return-line airtight after shut-down. No drying or clogging can occur due to the closed ink circuit. Even after long-term shut-downs, drying of ink can

be excluded. By pressing only one button the printer starts and the nozzle seal opens automatically. The JET3 is ready to print in one minute.

The efficiency of the JET3 printer is ideal. State-of-the-art technology in hydraulics, electronics and print head design guarantee minimum use of ink, solvent and energy as well as minimum maintenance requirements.

The JET3 is easy to integrate into existing machines. The round and sturdy print head can be installed in each direction. Several up-to-date interfaces like Ethernet, USB and so on, are available for optimal connection. The stainless steel cabinet offers the protection class IP 54 and for rough environments, the JET3pro with the protection class IP 65 is ideally suitable.

LEIBINGER JET3 is the state-of-the-art inkjet printer which achieves requirements for marking and coding systems in the industrial environment for the present and future. Highest availability, highest efficiency, various opportunities for integration and easiest handling. Typical attributes for quality "made in Germany".

Different kind of products can be printed with fast-drying inks. Typical applications for the LEIBINGER JET3 are, for example, food, packaging, pharmaceuticals, plastic, automotive, cable, steel, beverages and electronics.

LEIBINGER JET3pi is the specialist for working with pigmented contrast inks. The LEIBINGER hydraulics design and the automatic nozzle seal are developed especially for work with pigmented inks and guarantee highest reliability.

