

**JET RAPID**  
TECHNICAL DATA

EN

**JET RAPID**

**OPTION  
SPEED PLUS**

**JET RAPID**



## JET RAPID

**General high-speed applications aside from cables, wires, hoses and pipes**

- JET3up applications with 30% higher speed
- Multiline printing
- Same print modes as JET3up
- Larger drops, higher contrast
- Broad range of inks

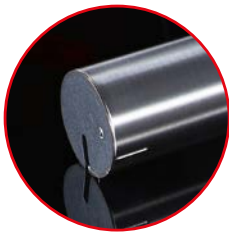
## SPEED PLUS OPTION

**Single-line high-speed printing at up to 800 m/min**

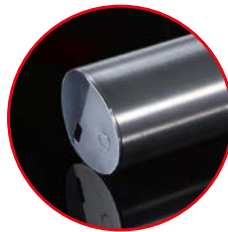
- Versatile in use thanks to special high-speed print mode
- E.g. printing of film webs at up to 800 m/min
- Tapered printhead cover for optimum positioning
- Very good print quality at high print speeds
- Select range of inks

JET **RAPID**

**SPEED PLUS  
OPTION**





- **Rapid printhead**
- **128 kHz drop frequency**
- **55 µm nozzle**



Beveled printhead cover

- **Rapid printhead**
- **128 kHz drop frequency**
- **50 µm nozzle**

# JET RAPID

	JET Rapid	Speed Plus Option
Printhead	SK6	SK6 HS
Printhead dimensions		
Umbilical	Length: 3m	Length: 3m
Maximum print speed	Up to 30 % faster than the standard JET3up	800 m/min
Characters per inch [cpi]	10 cpi at 413 m/min Print mode: 7x5 dots	8 cpi at 800 m/min Print mode: 5x5 speed
Oscillator frequency	128 kHz	128 kHz
Nozzle size	55 µm	50 µm
Available print modes	Same print modes as JET3up Up to 32 dots	Line Mode      5x5 speed 3x7 tower      5x5 speed small 3x7 tower small   7x5 5x5              7x5 speed 5x5 small
Printable lines	Multiline / up to 5 lines	Single-line
Compressed air required	Not required. Available as an option.	Yes. 2 l/min

## Print sample stroke width: 0.427 mm

3x7 dot tower		 806 m/min 2,644 ft/min
3x7 dot tower small		 806 m/min 2,644 ft/min
5x5 dot small speed		 645 m/min 2,116 ft/min
5x5 dot small		 537 m/min 1,761 ft/min
5x5 dot	 537 m/min 1,761 ft/min	 537 m/min 1,761 ft/min
7x5 dot speed		 460 m/min 1,509 ft/min
7x5 dot	 358 m/min 1,174 ft/min	 403m/min 1,322 ft/min
7x5 dot 2 lines	 146 m/min 479 ft/min	
7x5 dot 3 lines	 119 m/min 390 ft/min	
16x10 dot High Quality	 124 m/min 406 ft/min	
32x20 dot High Quality	 80 m/min 262 ft/min	

## JET RAPID TECHNICAL SPECIFICATIONS

### PRINT OUTPUT/FUNCTIONS

- Print speed up to 600 m/min
- Character height 1.0 to 24 mm
- Country- and industry-specific fonts: Arabic, Cyrillic, Chinese, Persian, etc.
- Print modes: from 3x7 to 32x20, special fonts, user-programmable fonts, vertical printing, line mode.
- Multiline fonts (1 to 5 lines).
- Fonts and graphics can be positioned and combined in print jobs as required
- Proportional function for all fonts
- Adjustable font height and font width
- All standard barcodes and DataMatrix codes (ECC 200), GS1-DataMatrix (EAN/ECC), QR code, PPN code (only JET Rapid)
- Only barcodes up to a print height of 7 dots with Speed Plus option
- Time, auto-adjustable date, auto-adjustable expiration date, weekdays, calendar weeks, Julian calendar, shift identification
- Replacements: all date, time and counter functions can be set using user-programmed replacements
- 32 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 text, inverse, reverse and alternating prints (object-dependent)
- Dynamic backward printing for traversing lines
- Programmable batch production and interlinking of multiple jobs
- "External text" function from scanner or interface
- Processing of variable data from external files on USB stick or interface
- Function to stop printing when preselected amount has been reached
- Product jam detection, product position monitoring
- Autostart function
- Prompt function (quick access)
- Solvent saving mode
- Self-test function

### DATA MANAGEMENT/SECURITY

- Data buffer in case of power failure
- File manager
- Job management with saved machine parameters
- Data logging, production log
- Upload and download of jobs and graphics from USB stick or over network
- Select jobs (1023 jobs can be selected via the PLC or scanner)

### HANDLING/DATA INPUT

- 10.4" color TFT touchscreen display (SVGA)
- Create and edit jobs during production
- User-defined button for direct access
- Menu languages: European languages, Vietnamese, Arabic, Chinese, Thai, Korean, Cyrillic, Persian, etc.
- Integrated font and graphics editor
- Illustrated operator instructions
- Alternative control using the data interface (serial, Ethernet)
- Country-specific on-screen key pad
- Operation optionally using mouse or key pad
- Comprehensive self-diagnosis and status display with easy-to-understand text, help function, printer status display
- Storage of any number of jobs and graphics
- Password function and service menu
- Windows-based interface, WYSIWYG, real-time display updates
- Remote control via VNC

### INTERFACES, INPUTS/OUTPUTS

- Product detector input PNP/NPN 24 V, FIFO buffered
- Incremental encoder input (TTL 5 V, HTL 24V, RS422 5 V)
- 9 digital inputs and 8 digital outputs. Freely selectable
- Printer alarm, low fluid, print ready, print finished, external job selection, etc.
- Serial port RS232 up to 115,200 baud
- USB port
- Ethernet (industry standard M12D), script protocol
- Sensor for product monitoring and speed measurement
- Optional: Special interface for connecting multiple printers

### LEIBINGER-HYDRAULIC SYSTEM

- Low maintenance diaphragm pumps with optimized on-time
- Fully automatic viscosity and pressure control
- Thermally isolated hydraulics
- No external compressed air supply necessary
- Automatic interval function
- EcoSolv - solvent recycling system (optional)

### PRINthead

- Flexible break-resistant umbilical, length: 3 m
- Stainless steel cabinet
- Fully automatic "SEALTRONIC" nozzle and gutter seal
- Fully automatic drop charging, drop break off
- Nozzle size: 55 µm
- Any installation location, even for overhead applications
- Safety switch for locking the printhead
- Options: head ventilation, umbilical at 45° to 90° angle, various printhead versions
- Automatic inkjet monitoring

### STORAGE TANK

- Capacity of non-pressurized ink and solvent storage tank: 1.3 l, can be topped up during production
- Fill level display with fully automated monitoring
- Display for pending printouts

### INKS

Which inks are available depends on the printer type and the selected options

- Ink consumption: up to 160 million characters/l (matrix 5x5 / nozzle 50 µm)
- Solvent consumption: Can be reduced to less than 1.2 ml/hour using EcoSolv (depending on nozzle size, solvent base and ambient temperature)
- Various colored inks and soft pigmented inks
- Fast-drying solvent inks (<1 sec)

### WEIGHTS AND PROTECTION CLASSES

- Weight: Printhead 1.5 kg, cabinet 20.5 kg
- IP 54 protection class, optional: IP 65

### POWER RATINGS AND AMBIENT CONDITIONS

- 100 - 240 V, 50 - 60 Hz, typically 20 W
- Temperature range + 5 °C to + 45 °C
- Relative humidity max. 90%, non-condensing

### ACCESSORIES

Product detector, incremental encoder, printer stand, printhead brackets, alarm lamps, etc.

- Software for remote control and multi-head control



## TECHNICAL SPECIFICATIONS for **JET RAPID** including **Speed Plus** Option

### PRINT OUTPUT/FUNCTIONS

- Print speed up to 800 m/min
- Character height 1.2 to 16 mm, depending on nozzle size and head type
- Country- and industry-specific fonts: Arabic, Cyrillic, Chinese, Persian, etc. Fonts 3x7 to 7x5, vertical printing (tower printing), line mode, single-line printing
- Fonts and graphics can be positioned and combined in print jobs as required
- Proportional function for all fonts
- Adjustable font height and font width Only barcodes up to a print height of 7 dots
- Time, auto-adjustable date, auto-adjustable expiration date, weekdays, calendar weeks, Julian calendar, shift identification
- Replacements: all date, time and counter functions can be set using user-programmed replacements
- 32 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 text, inverse, reverse and alternating prints (object-dependent)
- Dynamic backward printing for traversing lines
- Programmable batch production and interlinking of multiple jobs
- "External text" function from scanner or interface
- Processing of variable data from external files on USB stick or interface
- Function to stop printing when preselected amount has been reached
- Product jam detection, product position monitoring
- Autostart function
- Prompt function (quick access)
- Solvent saving mode
- Self-test function

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- Data buffer in case of power failure
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- User-defined button for direct access
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- Country-specific on-screen key pad
- Operation optionally using mouse or key pad
- Comprehensive self-diagnosis and status display with easy-to-understand text, help function, printer status display
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- Password function and service menu
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- Ethernet (industry standard M12D), script protocol
- Sensor for product monitoring and speed measurement
- Optional: Special interface for connecting multiple printers

### LEIBINGER-HYDRAULIC SYSTEM

- Low maintenance diaphragm pumps with optimized on-time
- Fully automatic viscosity and pressure control
- Thermally isolated hydraulics
- No external compressed air supply necessary
- Automatic interval function
- EcoSolv - solvent recycling system (optional)

### PRINthead

- Supplied with 2 printhead covers
- Flexible, break-resistant umbilical, length: 3 m
- Stainless steel cabinet
- Fully automatic "SEALTRONIC" nozzle and gutter seal
- Fully automatic drop charging, drop break off
- Nozzle size: 50 µm
- Any installation location, even for overhead applications
- Safety switch for locking the printhead
- External head ventilation
- Options: umbilical at 45° to 90° angle, various printhead versions
- Automatic inkjet monitoring

### STORAGE TANK

- Capacity of non-pressurized ink and solvent storage tank: 1.3 l, can be topped up during production
- Fill level display with fully automated monitoring
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### INKS

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- IP 54 protection class, optional: IP 65

### POWER RATINGS AND AMBIENT CONDITIONS

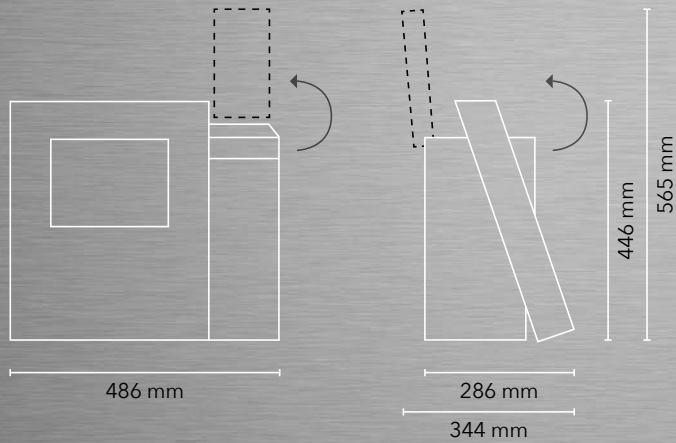
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- Software for remote control and multi-head control



## JET RAPID Dimensions



**MARKTEC**<sup>TM</sup>  
Automated Marking, Labeling & Packaging Systems

8785 Ag Park Drive North  
Batavia, NY 14020  
Tel: 585-344-4102 | Fax: 585-344-4109  
[www.marktecprods.com](http://www.marktecprods.com)

**LEIBINGER**  
Coding and Marking Systems

Paul Leibinger GmbH & Co. KG  
Daimlerstraße 14  
78532 Tuttlingen  
Germany

Phone +49 (0) 74 61 / 92 86-0  
Fax +49 (0) 74 61 / 92 86-199  
[info@leibinger-group.com](mailto:info@leibinger-group.com)

[www.leibinger-group.com](http://www.leibinger-group.com)