

DATASHEET

VIAjet™ V | SERIES

Powered by MPERIA®, Matthews' VIAjet™ V-Series marking system features our reliable Drop-on-Demand (DOD) valve technology which marks on porous and non-porous substrates including metal, paper and pulp, wood, concrete and plastic. Matthews' DOD valve printheads are considered the fastest in the industry, marking products at speeds up to 800 fpm (244 m/min), with the longest life—over 6 billion firings per head.

The V-Series features large character printing, ranging from 1/8" to 5" (3 mm to 127 mm) and the capability to stack printheads for large logos. These features, combined with its rugged design, make V-Series ideal to meet the demands of extreme environments such as building products, steel mills and other industrial environments.

The MPERIA® controller effectively manages messages and settings for multiple printers across one or several production lines or plant locations. An extensive selection of pre-formatted and configurable counters, batch controls, user-defined text fields and barcode symbologies makes message creation and selection a breeze with the intuitive touchscreen interface. Seamless integration with ERP/MRP/WMS systems helps to reduce coding errors. Best of all, MPERIA® is expandable, allowing you to add other printheads or other print technologies as needed, promising a sound secure investment. Our DOD valve technology and MPERIA® controller are connected by V-Link, an enclosed module featuring an internal power supply and printhead driver board. Each V-Link drives up to 32 valves (1-4 printheads). Multiple V-Links can be stacked and networked through MPERIA®, providing a flexible and scalable system for small or very large applications.

VIAjet™ V-Series Technical Specifications

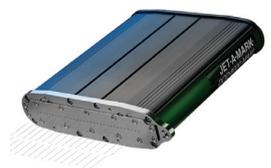
Ink Delivery System

- Various available systems ranging from 2x1 liter capacity up to large capacity (19 liters/5 gallon), 208 liters/55 gallon, or 275 gallon totes
- Dye-based or circulatory for pigmented inks
- Integrated low ink warning and warning output signals

Inks

- For porous and non-porous applications, as well as opaque and pigmented applications
- Recommended for building products, sheet metal, products, paper, pulp, wood, concrete, plastics, packaging, and other challenging substrates
- Available as water-based, water fast, alcohol (n-propylene, isopropylene, ethanol), ethyl acetate, MEK, acetone, heptane and other specialty solvents

- + Longest life for DOD valve printheads, with over 6 billion firings between rebuilds
- + Extensive selection of fast dry and/or pigmented inks available
- + 7"–12" (177 mm–304 mm) touchscreen controllers are available with various IP ratings and performance depending on your demand for one head or multiple
- + Remote connectivity (Virtual Network Computing)
- + Effortless integration with ERP/MRP/WMS systems



MPERIA® Platform

MPERIA® Controller⁽¹⁾

- + Controls multiple production lines
- + Combination of multiple inkjet technologies
- + Stack printheads for extra print height and resolution
- + Touchscreen interface
- + Built-in database
- + IP20/IP65 versions
- + Network-ready
- + Simple message creation & editing
- + Application-specific plugins
- + Password-protected user levels
- + Troubleshooting / maintenance screens
- + Virtually no storage limits for number of messages/logos, message length, types of barcodes and time codes, etc.
- + Available in 7"-15"
- + On-board image editor
- + Virtual simulator
- + Intuitive program design
- + Windows/Codesoft driver
- + TrueType fonts, grayscale/color images
- + Guided installation/configuration
- + Multilingual with full BIDI support

Communications & Networking

- + Ethernet-based with advanced connectivity possibilities for ERP-systems, computers and PLCs
- + Remote User Interface control via VNC

Print Capabilities

- + Static and dynamic text fields
- + Logos
- + Date and time clocks
- + Sequential and batch counters
- + True type fonts with density settings
- + Bi-directional printing
- + Barcodes and 2D codes

V-Series V-Link

- + Number of Printheads: 1-4 (32 valves max)
- + Number of Production Lines Controlled by Single V-Link: Up to 2 triggers and 2 encoders per V-Link
- + Electrical Operating Conditions:
90-264 V AC 50-60 Hz 2.5 A
Temp: 32-113° F (0 - 45° C)
Humidity: 0 - 90 % non-condensing IP53
- + Mounting Options: Wall mount, bookshelf mount, DIN-rail mount
- + Features: Individual dot size control, electronic valve adjustment, seamless printing on multiple products simultaneously

	Printhead Type	Minimum Character Size	Maximum Character Size	Rec. Print Distance
8000+ Maxi Max. speed: 780 fpm⁽²⁾	7-Valve	1/4" (6.35 mm)	1 1/4" (31.75 mm)	1/2" (12.7 mm)
	16-Valve	1/4" (6.35 mm)	2 1/2" (63.5 mm)	1/2" (12.7 mm)
	32-Valve	1/4" (6.35 mm)	5" (127 mm)	1/2" (12.7 mm)
8000+ Midi Max. speed: 400 fpm⁽³⁾	7-Valve	3/16" (4.76 mm)	1 1/4" (31.75 mm)	3/32" (2.28 mm)
	16-Valve	3/16" (4.76 mm)	2 1/2" (63.5 mm)	3/32" (2.28 mm)
	32-Valve	3/16" (4.76 mm)	5" (127 mm)	3/32" (2.28 mm)
8000+ Mini Max. speed: 120 fpm⁽²⁾	7-Valve	3/32" (2.38 mm)	1 1/4" (31.75 mm)	1/4" (6.357 mm)
	16-Valve	3/32" (2.38 mm)	2 1/2" (63.5 mm)	1/4" (6.357 mm)
	32-Valve	3/32" (2.38 mm)	5" (127 mm)	1/4" (6.357 mm)

(1) Find detailed information about our MPERIA™ controllers on the MPERIA™ controller data sheet.

(2) At 1.8 mm spacing

(3) At 1.0 mm spacing