Drop On Demand Inkjet Printing

Mperia V-Series

Low ink consumption and increased reliability.

- Tilt function for variable character height
- High quality prints at line speeds, up to 240 m/s
- Patented nozzle design to eliminate nozzle blockages









Matthews drop on demand (DOD) technology has a performance record of solving the most challenging, industrial and packaging coding applications.

Our new Mperia V-Series 8000+ printheads deliver low ink consumption with high print quality and improved speeds. Find your recommended solution by selecting the printhead for your application.

Robust

Matthews Swedot print heads, which constitute the heart of the printing system, are based on a patented valve technology.

Precision jewels set in a stainless steel faceplate provide dramatically lower ink consumption and high print quality To describe it simply, our printheads propel drops of ink from a pressurized ink chamber when a sealing valve is quickly opened by a magnetic force. Using drop on demand (DOD) technology our fastest valves can produce as many as 3000 drops per second.

Reliability

With only one moving part, this printhead features a more reliable design with extremely long standby times and reduced maintenance requirements. With 500 times less ink in the plunger, this new range of printheads not only achieves high resolution

printing but also lower ink consumption. The extremely short nozzle path (<10mm) ensures that any dried ink simply pushes out after extended standby.

Flexibility

The Mperia V-Series 8000+ printheads present the flexibility to easily modify character heights from 5mm and 128mm, large character marking can be achieved by stacking several printheads on top of each other to make large graphic, such as a logotype. Numerous lines of text are possible or higher resolution graphics with the selection of 7, 16 or 32 valves combination. Fast start-up and color change without purging.



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Technical Specifications Mperia V-Series 8000+ Printheads

| | Printhead Type | Min. Char. Size | Max. Char. Size | MAX SPEED(1) | Max. Print Distance(3) | 3-Way Valve(5) | Dimensions |
|--|---|--|---|--|---|----------------|--|
| 8000+ Maxi | 8000+ 7-Valve 8000+ 16-Valve 8000+ 32-Valve | 1/4" (6.35mm) 1/4" (6.35mm) 1/4" (6.35mm) | 1 1/4" (31.75mm) 2 1/2" (63.5mm) 5" (127mm) | 780fpm ⁽¹⁾ /3.96mps 780fpm ⁽¹⁾ /3.96mps 780fpm ⁽¹⁾ /3.96mps | 1/2" (12.7mm) 1/2" (12.7mm) 1/2" (12.7mm) | Yes Yes | 7.52"L x 1.68"W x 4.84"H (191 x 42.7 x 123mm) 7.48"L x 1.73"W x 6.26"H (190 x 44 x 159mm) 7.48"L x 1.73"W x 8.80"H (190 x 44 x 159mm) |
| 8000+ Midi | 8000+ 7-Valve 8000+ 16-Valve 8000+ 32-Valve | 3/16" (4.76mm) 3/16" (4.76mm) 3/16" (4.76mm) | 1 1/4" (31.75mm) 2 1/2" (63.5mm) 5" (127mm) | 400fpm ⁽²⁾ /2.03mps 400fpm ⁽²⁾ /2.03mps 400fpm ⁽²⁾ /2.03mps | 1/2" (12.7mm) 1/2" (12.7mm) 1/2" (12.7mm) | Yes Yes | 7.52"L x 1.68"W x 4.84"H (191 x 42.7 x 123mm) 7.48"L x 1.73"W x 6.26"H (190 x 44 x 159mm) 7.48"L x 1.73"W x 8.80"H (190 x 44 x 223.4mm) |
| 8000+ Mini IP65- 7-Valve Printhead available for washdown applications. ⁽⁴⁾ | 8000+ 7-Valve 8000+ 16-Valve 8000+ 32-Valve | 3/32" (2.38mm) 3/32" (2.38mm) 3/32" (2.38mm) | 1 1/4" (31.75mm) 2 1/2" (63.5mm) 5" (127mm) | 400fpm ⁽²⁾ /2.03mps 400fpm ⁽²⁾ /2.03mps 400fpm ⁽²⁾ /2.03mps | 1/4" (6.35mm) 1/4" (6.35mm) 1/4" (6.35mm) | Yes Yes | 7.52"L x 1.68"W x 4.84"H (191 x 42.7 x 123mm) 7.48"L x 1.73"W x 6.26"H (190 x 44 x 159mm) 7.48"L x 1.73"W x 8.80"H (190 x 44 x 223.4mm) |
| Controllers | Mperia, SX32e, V84, V80i | | | | | | |
| Inks | Water based, Water fast, Alcohol (n-propylene, ethanol), MEK, Acetone, Pigmented. | | | | | | |

(1) At 1.8mm spacing (2) At 1.0mm spacing (3) At <200 fpm (4) IP65 3.4° Dia. x 5.2° L (87.5 x 132.0mm) (5) Uniquie 3-way valve enables you to quickly purge solvent, minimizing maintenance and downtime.







