Next generation printhead for the use of aqueous ink, offering high-resolution printing and support for multiple ink colors with multi-row nozzles, as well as enhanced aqueous ink compatibility with new bonding technology.

Single-pass 600 dpi high-resolution printing and support for multiple ink colors

With 1,280 nozzles configured in 4 x 150dpi rows, this head achieves high-resolution 600dpi printing. Isolated ink paths enable a single printhead to jet up to two ink colors.

Excellent durability and extended service life

Ricoh inkjet print heads are made of stainless steel. These heads are highly robust and offer excellent anti-corrosion properties for multiple inks, resulting in excellent durability and extended service life.

Support for gray-scale

Achieves excellent gray-scale rendering at up to 4 levels.

Support for aqueous ink

These printheads are dedicated to aqueous ink and suitable for applications such as textiles and labels. Additionally, the ink path is isolated from the actuator (piezo elements), i.e. no ink contact.

Variable drop volume capability

The multi-drop capability allows the creation of a range of drop sizes enabling gray-scale printing.
Inkjet head with support for multiple nozzles and colors (Enhanced aqueous Ink compatibility)
Choose from two-color or four-color models to suit your application.

**RICOH MH5421 (2 color model)**

- **Method**: Piston pusher with metallic diaphragm plate
- **Print Width**: 54.1mm
- **Number of nozzles**: 1280 (4 x 320 channels), staggered
- **Nozzle spacing (Row to row distance)**: A: 0.55mm  B: 11.81mm (See illustration below)
- **Nozzle spacing (Row to row distance)**: 1/150” (0.1693mm)
- **Max. number of color inks**: 2 colors
- **Compatible ink**: Aqueous ink
- **Operating temperature range**: Up to 50°C
- **Temperature control**: Integrated heater and thermistor
- **Jetting frequency**: 30kHz
- **Drop volume**: 7/14/21pl (depending on the ink)
- **Viscosity range**: 11mPa s
- **Gray-scale**: 4 levels (depending on the ink characteristic)
- **Total length**: 248mm (Cable length: 179mm)
- **Total printhead dimensions**: 89(W) × 69(D) × 24.5(H)mm (3.5” × 2.7” × 1.0”) *excluding cables & connectors
- **Weight**: 155g *excluding cables & connectors

**RICOH MH5441 (4 color model)**

- **Max. number of color inks**: 4 colors
- **Compatible ink**: Aqueous ink
- **Operating temperature range**: Up to 50°C
- **Temperature control**: Integrated heater and thermistor
- **Jetting frequency**: 30kHz
- **Drop volume**: 7/14/21pl (depending on the ink)
- **Viscosity range**: 11mPa s
- **Gray-scale**: 4 levels (depending on the ink characteristic)
- **Total length**: 500 (Cable length: 431mm)
- **Total printhead dimensions**: 89(W) × 69(D) × 24.5(H)mm (3.5” × 2.7” × 1.0”) *excluding cables & connectors

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**Nozzle Alignment pin**

A: 0.55mm
B: 11.81mm

**Total printhead dimensions**

- Please contact your sales representative for details on performance, specifications, and restricting conditions, etc.