

Industrial Inkjet

**RICOH**  
imagine. change.

# RICOH MH5420/5440

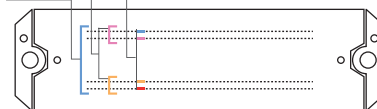
This is a print head with 600 dpi native resolution.  
Also capable of jetting up to 4 colors.



## Single-pass 600dpi 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. Additionally, the ink paths are isolated, enabling a single head to jet up to four ink colors.

One color : 150dpi x 4 rows/color → 600dpi  
Two colors : 150dpi x 2 rows/color → 300dpi  
Four colors : 150dpi x 1 row/color → 150dpi\*



\* Where MH5440 is used.

## Support for grey-scale

Achieves excellent gray-scale rendering with up to 4 scales per dot.

## 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 different inks

With its built-in heater, these heads are capable of jetting high-viscosity inks. Additionally, the ink path is isolated from the actuator (piezo elements), i.e. no ink contact.

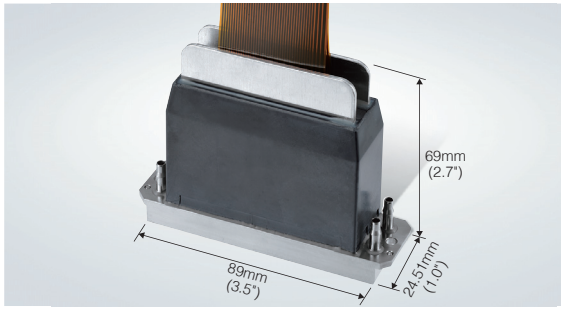
## Variable drop volume capability

The multi-drop capability allows the creation of a range of drop sizes enabling grey-scale printing.

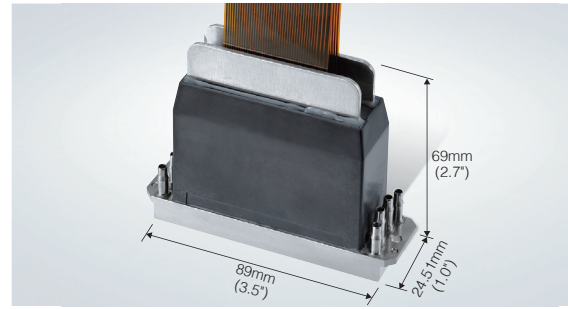
# Inkjet head with support for multiple nozzles and colors

Choose from two-color or four-color models to suit your application.

MH5420 (two-color model)



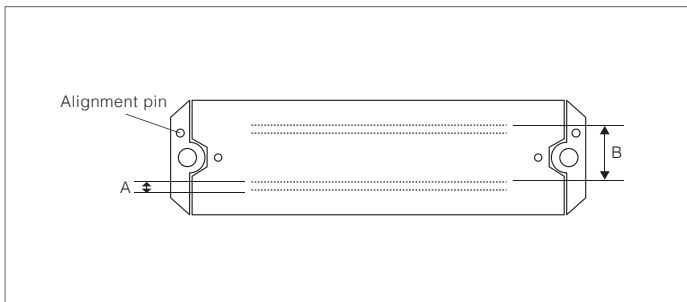
MH5440 (four-color model)



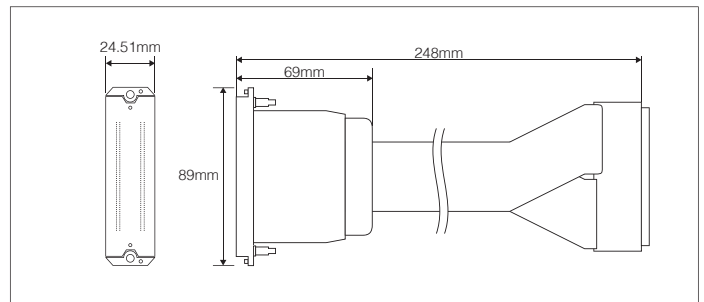
	MH5420	MH5440
Method	Piston pusher with metallic diaphragm plate	
Print Width	54.1 mm(2.1")	
Number of nozzles	1,280 (4 x 320 channels), staggered	
Nozzle spacing (4 color printing)	1/150"(0.1693 mm)	
Nozzle spacing (Row to row distance)	0.55 mm	
Nozzle spacing (Upper and lower swath distance)	11.81mm	
Compatible ink	UV, Solvent, Aqueous, Others.	
Total printhead dimensions	89(W) x 69(D) x 24.51(H) mm (3.5" x 2.7" x 1.0") excluding cables & connectors	
Weight	155 g	
Max.number of color inks	2 colors	4 colors
Operating temperature range	Up to 60°C	
Temperature control	Integrated heater and thermistor	
Jetting frequency	Binary mode : 30kHz / Grey-scale mode : 20kHz	
Drop volume	Binary mode: 7pl / Grey-scale mode : 7-35pl *depending on the ink	
Viscosity range	10-12 mPa·s	
Surface tension	28-35mN/m	
Grey-scale	4 levels	
Total Length	248 mm (standard) including cables	
Ink port	Yes	
Number of ink ports	MH5420 : 2 x dual ports / MH5440 : 4 x dual ports	
Alignment pin direction	Front (standard)	

\* Results obtained from continuous jetting test using standard Ricoh test ink.

## ■ Nozzle



## ■ External dimensions



- Product appearance and specifications may be changed without prior notice for improvement purposes.
- Company and product names are trademarks or registered trademarks of their respective companies.
- Please contact your sales representative for details on performance, specifications, and restricting conditions, etc.

**RICOH**  
imagine. change.

● Inquiries and orders: