

## Printhead naming convention

Konica Minolta offers an exceptional range of printheads including many variants. The following naming convention is used to uniquely identify each variant and clearly shows the heads' capabilities.

### KM 123 A B C D

#### Printhead type:

512  
1024  
1024i  
1800i  
128SNG

#### Firing method:

r : Independent  
No character:  
Shared wall

#### Drop size:

512 heads:  
L = 42pL, M = 14pL, S = 4pL  
1024 heads:  
L = 42pL, M = 14pL, S = 6pL  
1024i heads:  
L=35pL, M = 14pL  
1800i heads:  
S=3.5pL

#### Heater:

H : heater is fitted  
N : no heater fitted

#### Chassis type:

X 512 two ink port  
Y 512 single ink port  
B : KM1024  
E : KM1024i  
C : KM1800i  
  
A aqueous  
KOH potassium hydroxide  
NMP strong solvent

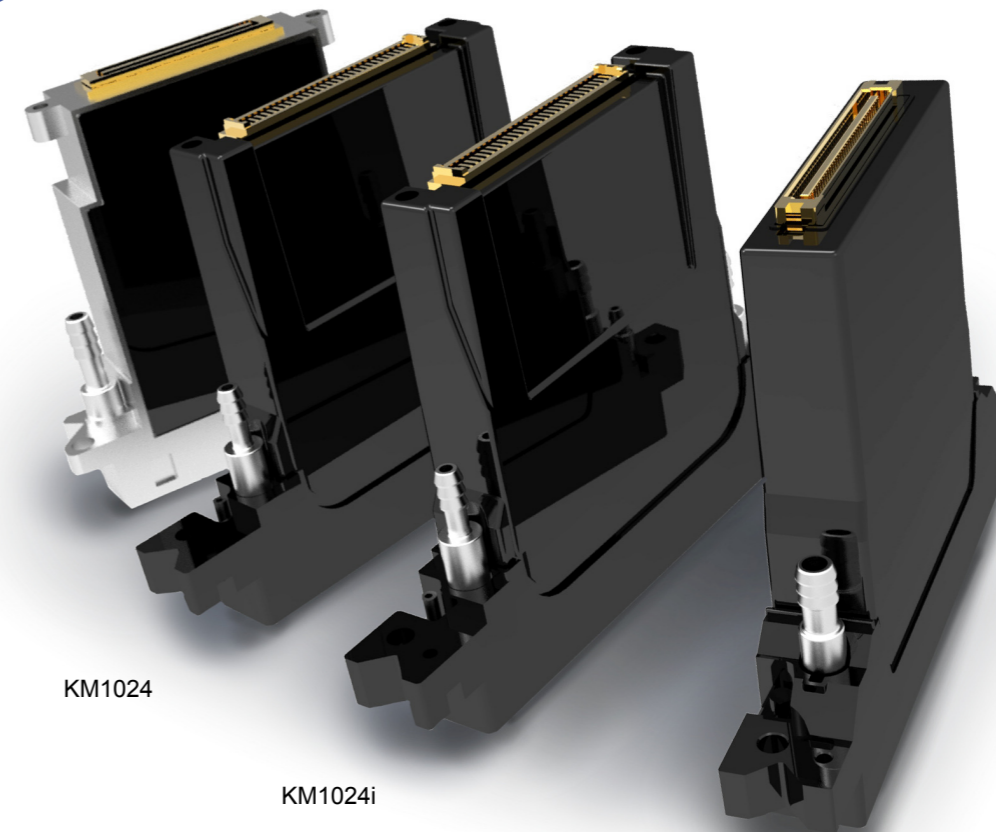
Printheads are not available in every possible variant and new head types may be introduced so please check the chart above for the availability of specific models.

## Printhead availability

Printhead ref	Nozzles	Ink /fluid type		Drop size			Heater		Chassis					Ink ports		Availability										
		High visc, aqueous, oil, UV and solvent	Low visc, aqueous	L	M	S	H	N	X	Y	B	E	C	1	2	Available SO - special order										
KM1800ISHC	1792	✓	—	—	—	✓	✓	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
KM1024LHE	1024	✓	—	✓	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
KM1024MHE	1024	✓	—	—	✓	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
KM1024LHB	1024	✓	—	✓	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
KM1024MHB	1024	✓	—	—	✓	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
KM1024SHB	1024	✓	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
KM1024MNB	512	✓	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
KM512LHX	512	✓	—	✓	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
KM512LNX	512	✓	—	✓	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
KM512MHX	512	✓	—	—	✓	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
KM512MNX	512	✓	—	—	✓	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
KM512SHX	512	✓	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
KM512LAX	512	—	✓	✓	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
KM512MAY	512	—	✓	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
KM512LHY	512	✓	—	—	50pl	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
KM512MHY	512	✓	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
KM512LNX-NMP	512	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
KM512MNX-NMP	256	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
KM256MNY		✓	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Printhead ref	DPN	Oil, UV and solvent	Aqueous	Drop size	H	N	X	Y	B	Y	B	1	2	Available SO - special order
KM128SNGMB	128	✓	✓	1pl	—	✓	✓	—	—	—	—	✓	—	TBC



Konica Minolta printheads provide reliable performance and consistent 'out of box' quality - proven in single pass applications. All Konica Minolta printheads may be used in both binary and greyscale modes, providing variable drop size and higher print quality without the use of additional printheads.

#### KM512X

Easy ink change and a wide range of variants makes this a popular choice for development and production systems.

#### KM512Y

Compact design 512 nozzle head that is ideally suited for use in multi-head applications where space is limited.

#### KM1024

Ultra-slim 1024 nozzle head that is easy to work with and has best packing density in its class.

#### KM1024i

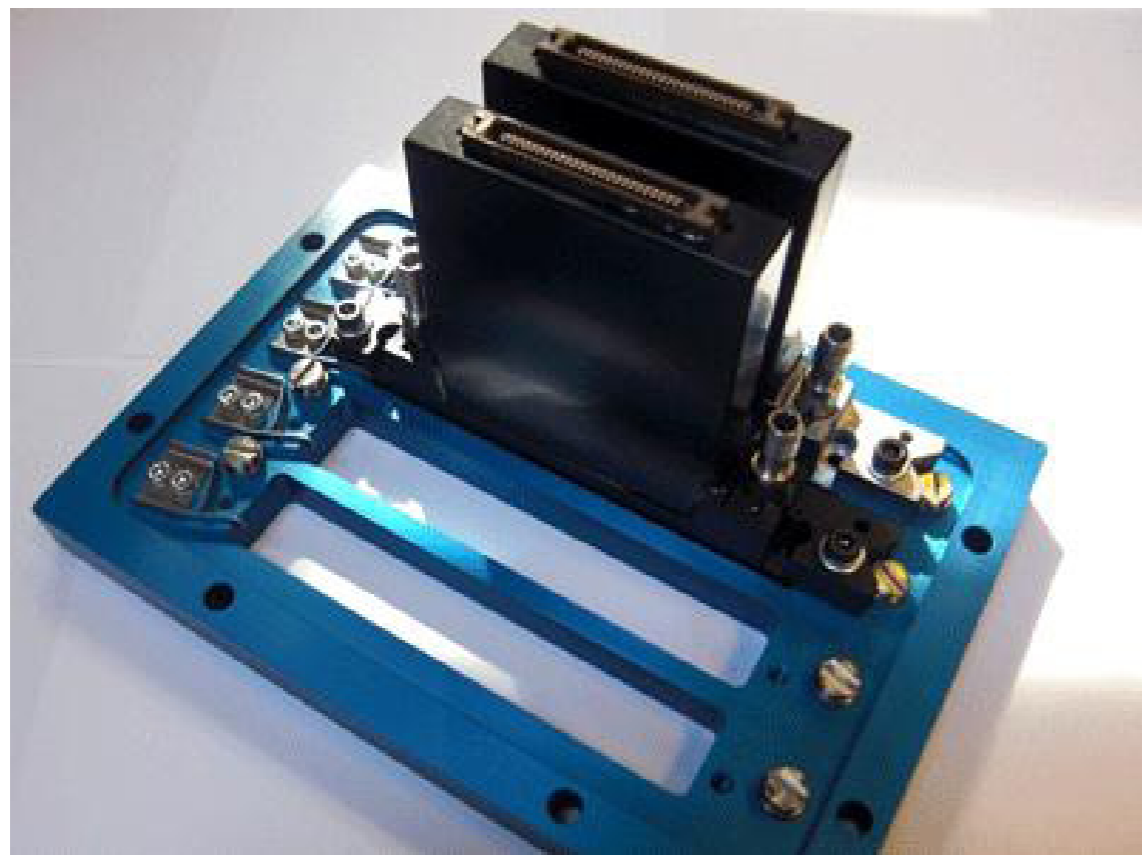
Dry channel technology gives 3x the print speed of the popular KM1024 heads without enlarging the mechanical footprint.

#### KM1800i

New 600dpi head. Dry channel technology gives high quality print at high speed from a very compact design.

Konica Minolta printheads offer superior chemical resistance, giving reliable, long-life performance. They are suitable for use with many innovative and novel fluids including NMP, in addition to a wide range of conventional inks including aqueous, oil-based, volatile solvent and UV cured. Ideally suited for "heavy particle" inks that require ink recirculation such as ceramics, white, or conductive silver. A 'same chassis' approach within each printhead range makes them ideal for use in the development of a product range. Drop size can be changed without the need to modify the mechanical design or the drive electronics.





## Konica Minolta KM1024 & 1024i Printhead

The KM1024 is ultra-slim and perfect for use in both single pass and scanning applications. Mounting printheads very close together allows the generation of the best print quality from your transport system. Any angular errors in the substrate transport system are minimised and colour registration is optimised.

Compact and lightweight, the KM1024 printhead is ideal for scanning systems where high resolution or productivity are critical. The very narrow nozzle plate means the printhead is ideal for printing onto curved or 3D objects. With the i-Series printheads the same ease-of-use and high reliability can be achieved at the highest line speeds.

The KM1024 is designed for use with a wide range of ink types and fluid technologies, including inks containing heavy pigments. The location of the ink ports makes it possible to circulate ink through the printhead, keeping heavy pigments in suspension and maintaining the ink in perfect condition ready for printing.

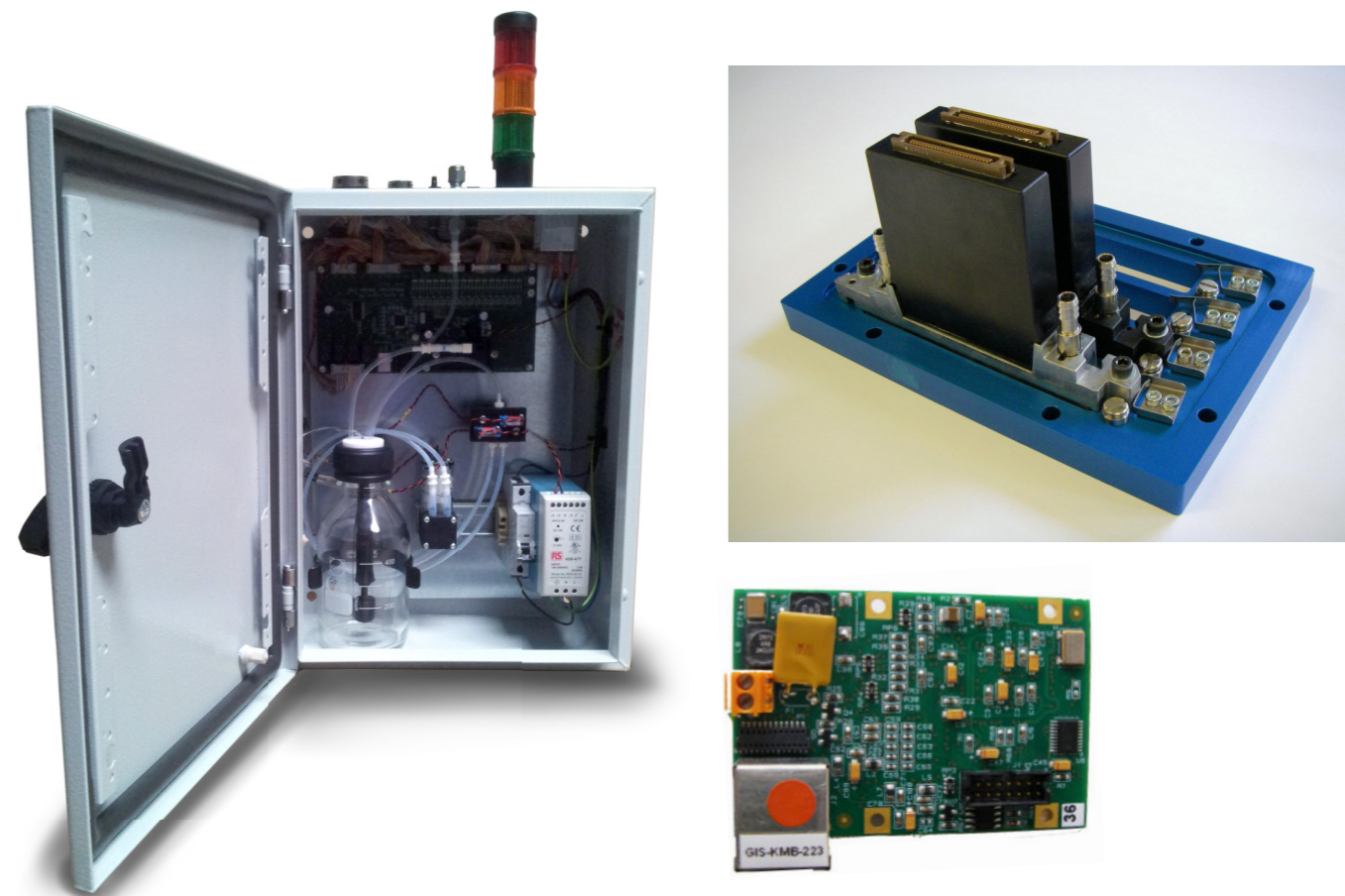
IJJ has also developed a very elegant ink system that provides sufficient flow to maintain the ink in perfect condition for printing. The design of the system is simple and reliable yet it provides very accurate control of ink pressure in the head, giving consistent, high quality print.

## Konica Minolta KM512 Printhead

The KM512 range of printheads offers the widest variant choice and is available with three different nozzle sizes, with or without a built in heater and also for use with aqueous fluids. The KM512 printhead can be found in a wide range of both single pass and scanning systems.

The KM512X heads are designed specifically for use with higher viscosity aqueous based inks and fluids. All 512 channels are available for printing, giving a 360dpi native resolution.

Designed for robust, precise performance and extreme ease of use, the KM512 range of printheads is ideal for fast product introduction. With a common electrical interface and standard form factors, it is easy to add a different drop size or ink type to a product range without extensive re-design of the existing mechanical or electronic systems.



## Printheads to Print Systems

### Printhead mounting and purge plates

Align multiple printheads quickly and accurately.

Cone screw and spring designs make adjustment precise and predictable. Heads are recessed to minimise the risk of damage by the substrate. Available with or without drawings.

### Ink Systems

Single or multi-colour, multi-head ink systems provide ink at the correct negative pressure to ensure optimum printhead performance. Pressure and purge settings can be set according to the physical configuration of the development or production system. Available with or without degassing units.

Fully recirculating ink supply systems available. These systems ensure reliable operation with “unstable” or “heavy pigment” inks for example for ceramics. We have ink supply systems suitable for large single pass systems with 100+ printheads.

### Control electronics

Industrial Inkjet can supply a range of control electronics and software (including products from Konica Minolta and Global Inkjet Systems).

IJJ control electronics are available for a wide range of applications. From low cost hardware designed to enable machine builders to use Konica Minolta heads in place of other manufacturer’s heads (without a full system re-design), to high speed control of multiple heads, printing full colour and real time variable data with a sophisticated software package.

Industrial Inkjet Ltd provides full technical and commercial support on behalf of Konica Minolta. Industrial Inkjet Ltd is the first point of contact for machine builders and integrators wanting to utilise Konica Minolta inkjet products. Industrial Inkjet Ltd works closely with its clients to ensure that their projects and developments capitalise on the strengths of Konica Minolta’s products, enabling new products to be brought to market quickly and efficiently. If you are considering Konica Minolta inkjet as part of your next development, contact IJJ to find out more about Konica Minolta’s exceptional range of printheads and how IJJ can support you.