

Press Information

Kyocera unveils high-performance inkjet printhead KJ4A-EX600RC-HX for label and packaging innovation

Enhanced support for white ink, varnish and foil decoration delivers faster, more versatile printing.

Kyoto/London, 15th October 2026. Kyocera Corporation announced plans to begin sales in November 2026 of a new circulating inkjet printhead for label and packaging printing. The printhead supports white ink, varnish ink¹, and foil decoration². By accommodating a wider range of ink viscosities and enabling high-speed printing, this product addresses the increasing demand for diverse decorative effects in the label and packaging market.



Kyocera's circulating inkjet printhead KJ4A-EX600RC-HX

Overview of Kyocera's new printhead

Product name	KJ4A-EX600RC-HX
Size (mm) ³	200 × 42 × 68 (width x depth x height)
Printing speed	100 m/min
Resolution	600 dpi
Effective print width	108.33 mm

¹ Varnish ink: A clear coating applied to printed materials to create glossy or raised effects that enhance appearance and perceived quality.

² Foil decoration: A printing technique that transfers metallic foil, such as gold or silver, onto printed surfaces to create premium decorative effects.

³ Reference value. Height is measured from the nozzle surface to the top of the connector.

Maximum drive frequency	40 kHz
Maximum droplet volume ⁴	21 pL ⁵
Minimum droplet volume ⁴	7 pL
Supported inks	UV ink
Supported viscosity range	8 - 11 mPa·s ⁶
Production site	Kirishima Plant, Kagoshima, Japan

Features

- 1. Kyocera's proprietary structure circulates ink near the nozzles to enable stable printing.**
- 2. Maximum droplet volume of 21 pL supports high-opacity⁷ and high-deposition printing.**
- 3. Expanded ink viscosity range of 8 – 11 mPa·s supports a wider variety of applications.**
- 4. Printing speeds of up to 100 m/min deliver one of the highest productivity levels among Kyocera's UV ink-compatible printheads.⁸**

Development background

The printing market continues to shift toward digital printing, enabling on-demand production. This change is driven by the need for small-lot, high-mix production and efforts to reduce environmental impact.

In the label printing market, demand is rising for effects that enhance printed materials, such as vivid colours from white ink, glossy and three-dimensional finishes from varnish ink, and metallic designs from foil decoration. At the same time, operations require consistent quality, higher productivity and reduced maintenance.

To address these needs, Kyocera developed the KJ4A-EX600RC-HX circulating inkjet printhead. Its proprietary fluid-channel design supports a broader range of ink viscosities and enables high-speed printing.

⁴ When using Kyocera standard ink.

⁵ pL, or picoliter: A unit used to express the volume of a single ink droplet. One picoliter is one trillionth of a liter.

⁶ mPa·s, or millipascal-second: A unit used to express the viscosity, or thickness and resistance to flow, of ink.

⁷ In the printing industry, the ability of ink or paint to cover the colour or pattern of the substrate.

⁸ Among Kyocera's UV ink-compatible printheads (as of September 2026).



Varnish application image

Features

1. Kyocera's proprietary structure circulates ink near the nozzles to enable stable printing

The structure – which circulates ink near the nozzle, made possible by Kyocera's proprietary flow path design technology – prevents ink components from settling or drying out and maintains a uniform ink temperature. This ensures stable ink ejection, even with high-viscosity or pigment-based inks and supports consistent print quality.

This design also reduces maintenance requirements during restarts, including printhead cleaning.

2. Maximum droplet volume of 21 pL supports high opacity and thick film effects

The maximum droplet volume has increased by 23% to 21 pL compared to the previous KJ4A-AL model. This larger volume improves white-ink opacity, making the underlying material less visible.

3. Expanded ink viscosity range supports a wider variety of applications

By expanding the compatible ink viscosity range from 6 - 7 mPa·s in previous models to 8 - 11 mPa·s, the range of usable inks has been broadened. This further expands the scope of digital printing applications, including diverse printing techniques and the reproduction of special textures.

4. Printing speeds of up to 100 m/min deliver high productivity

The drive frequency, which controls ink droplet ejection timing, has doubled from 20 kHz in the previous KJ4A-AL model to 40 kHz.

This higher frequency enables printing speeds up to 100 meters per minute, delivering one of the highest productivity levels among Kyocera's UV ink-compatible printheads.

With the KJ4A-EX600RC-HX, Kyocera aims to meet the printing industry's evolving needs and support the ongoing advancement of digital printing.



The press material is available for download via the following link:

<https://spgroup.box.com/s/ud0sardqgfncyzxximzj680m7ida6077>

For more information on Kyocera: uk.kyocera.com

About Kyocera

Kyocera has been successful in Europe for over 50 years. From its European headquarters in Esslingen am Neckar, KYOCERA Europe GmbH operates 27 sites including manufacturing facilities, with products ranging from fine ceramics, automotive, semiconductor and optical components to components for medical products, industrial tools, LCDs, touch solutions, industrial printing components, and consumer goods such as kitchen and office products.

KYOCERA Europe GmbH is a company of the [KYOCERA Corporation](#) headquartered in Kyoto/Japan, a renowned supplier in semiconductor, industrial and automotive components as well as electronic components, printing and multifunction systems, smart energy systems, and communications technology. Kyocera is one of the most experienced technology producers, with more than 65 years of industry expertise. The Kyocera Group comprises 279 subsidiaries (31 March 2026). With around 73,800 employees, Kyocera generated net annual sales of around EUR 11.83 billion in the 2025/2026 fiscal year.

Kyocera is ranked 1,123 on Forbes magazine's 'Global 2000' list for 2025 and ranked as 'The 100 Most Sustainably Managed Companies in the World' according to the Wall Street Journal. For the fourth time Kyocera has received an A ranking on the CDP A List for their performance on climate change. Kyocera has also received a silver rating in the EcoVadis Sustainability Survey and was acknowledged as a 'Top 100 Global Innovator 2026' for the tenth time by Clarivate, being one of the world's leading innovators.

Kyocera also takes an active interest in cultural affairs. The Kyoto Prize, a prominent international award, is presented each year by the Inamori Foundation – established by Kyocera founder Dr Kazuo Inamori – to individuals worldwide who have contributed significantly to the scientific, cultural, and spiritual betterment of humankind (equivalent to approximately €539,000 per prize category).

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