

CK1 & CK1L

High-quality Industrial Inkjet Heads



Quality

Smooth greyscales and excellent print quality, achieved by consistent drop formation and volumes, combined with accurate and repeatable dot placement.

Productivity

Robust head design and precise manufacturing tolerances ensure high print production yields.

Throughput

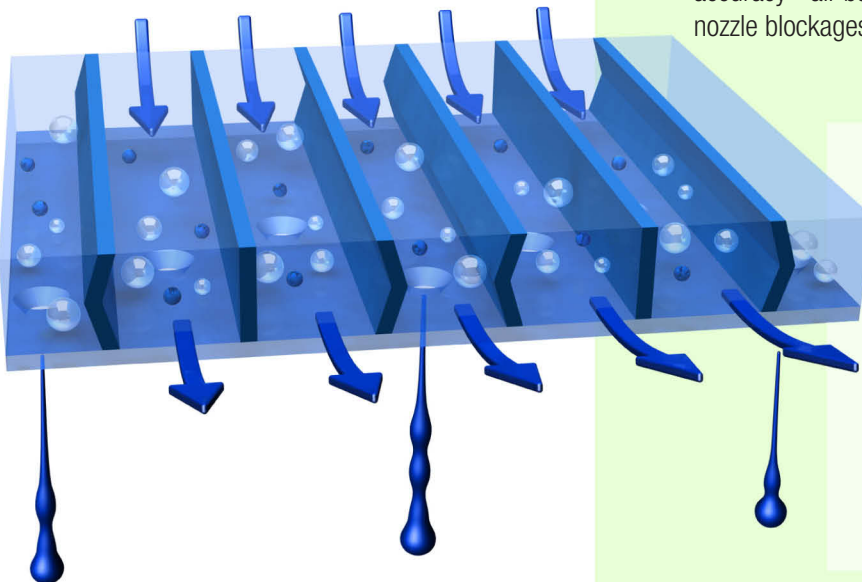
The CK1L head is designed for high throughput with large drop volumes – ideal for applications such as ceramic decoration.

Versatility

Capable of handling high viscosity and gravity fluids. UV-curing and oil-based fluids are supported. The range of applications is extensive.

Reliability

The through-channel fluid recirculation system, combined with side-shooter architecture guarantees excellent jetting performance and accuracy - air bubbles, drop deflection through sedimentation, and nozzle blockages are all eliminated.



Through-channel fluid recirculation benefits:

1. Air bubbles and unwanted particles are carried away from the nozzle.
2. Continuous fluid motion across nozzles prevents sedimentation, eliminating drop deflection and blockages.
3. A constant fluid temperature is maintained, ensuring consistent drop formation.
4. Auto-recovery from nozzle blockages minimizes fluid and substrate wastage.



Specifications

CK1

CK1L

Print method	Drop-on-Demand piezo, shared wall, shear mode technology	
Print width	53.657 mm	
Active nozzles	636 (2 rows of 318)	
Resolution	300 dpi	
Nozzle pitch	84.5 μ m	
Greyscale levels	8 levels (0, 1-7 dpd)	4 levels (0, 5-7 dpd)
Drop volumes	6-42 pl	51-90 pl
Print frequency ¹	4.97 kHz (at max. dpd)	4.8 kHz (at max. dpd)
Linear speed ¹	25 m/min (at max. dpd)	24 m/min (at max. dpd)
Piezo driving voltage	14-31 Volts	
Drop velocity	9-11 m/s	7-9 m/s
Jetable fluids	UV-curing & oil-based (consult us for compatibility assurance)	
Standard dimensions (mm) for both CK1 and CK1L	<p>Weight: 161 g</p>	
Dimensions (mm) with optional positioning plate ²	<p>Weight: 185 g</p>	

¹ Maximum print speed and linear frequency can be increased by reducing the number of drops per dot (dpd).

² A factory-fitted option enabling easy and accurate head positioning with a precision of 10 μ m to the 1st nozzle.

CK1/CK1L heads are designed with a different internal structure from CF1ou/CF1L heads.

TOSHIBA TEC CORPORATION

TOSHIBA TEC CORPORATION, Inkjet Business Group
www.toshibatec.co.jp/en/products/industrial/inkjet/

