TOSHIBA

Leading Innovation >>>

CF1 Family

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 CF1L and CF1XL heads are designed for high throughput with large drop volumes, making them 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 sideshooter architecture guarantees excellent jetting performance and accuracy - air bubbles, drop deflection through sedimentation, and nozzle blockages are 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 CFT CFTL CFTX	Specifications	CF1	CF1L	CF1XL
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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 μm			
Greyscale levels	8 levels (0, 1-7 dpd)	4 levels (0, 5-7 dpd)	6 levels (0, 1-5 dpd)	
Drop volumes	6-42 pl	64-90 pl	36-180 pl	
Print frequency 1	4.97 kHz (at max. dpd)	4.8 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)	24 m/min (at max. dpd)	
Piezo driving voltage	14-31 Volts			
Drop velocity	9-11 m/s	7-9 m/s	7-9 m/s	
Jettable fluids	UV-curing & oil-based (consult us for compatibility assurance)			
Standard dimensions (mm) for the CF1 family	67.2	22	Weight: 161 g	
Dimensions (mm) with optional positioning plate ²	Weight: 185 g	110.8 12.64 ± 0.01	4.64 ± 0.01	

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

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