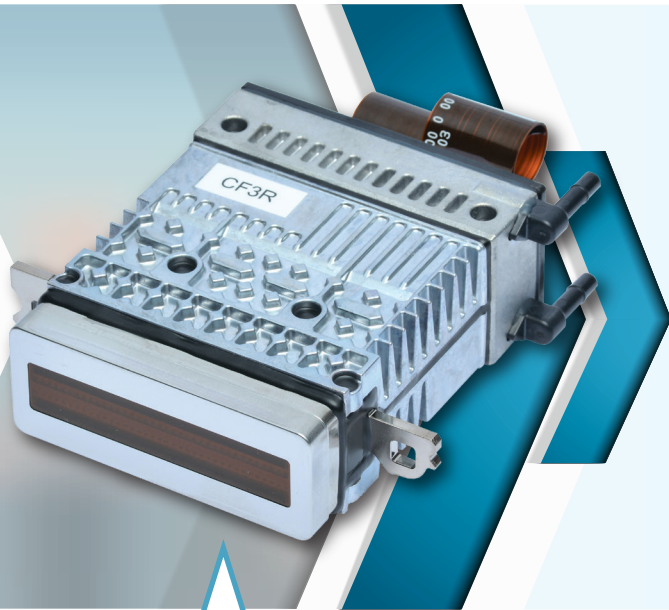


TOSHIBA

Ink recirculating type inkjet head

CF3/CF3R 600dpi - 1 colour / 300dpi - 2 colours

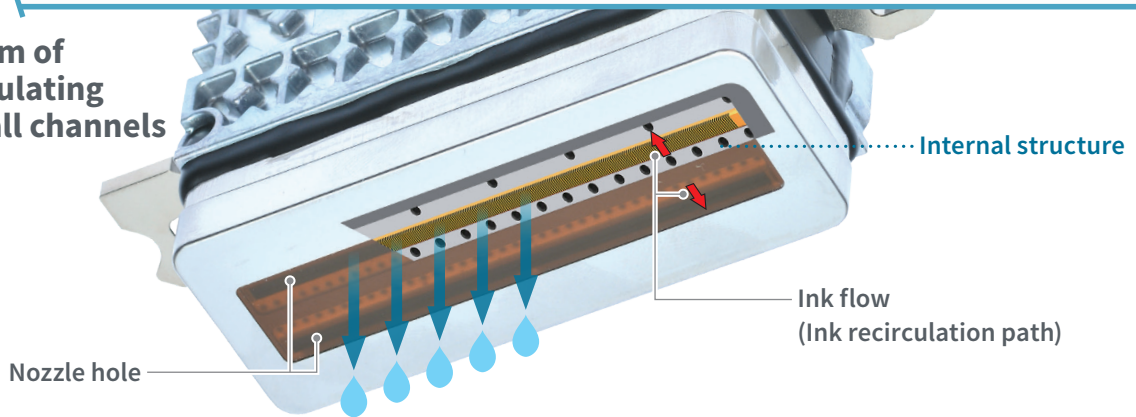


One-and-only industrial inkjet head having both 300dpi/row (doubled from our previous model) and ink recirculation through all channels

- Inherits **high jetting reliability and eco-friendliness** enabled by ink recirculation through all channels
- Suitable for jetting ink with **larger particle size and higher gravity**
- Use of 2 colours in one head **enabling the printer to be more compact**
- **Able to control drop volume per each nozzle, minimizing density variation**

Mechanism of ink recirculating through all channels

[Image Chart]



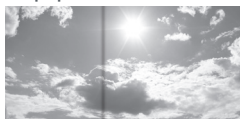
Per each nozzle drop volume control (Fine Adjustment)

The function to control drop volume per each nozzle, contributes to enhance image quality much further.

Without Fine Adjustment



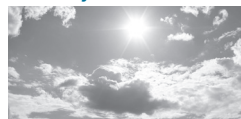
Variation in drop volume and drop speed



With Fine Adjustment

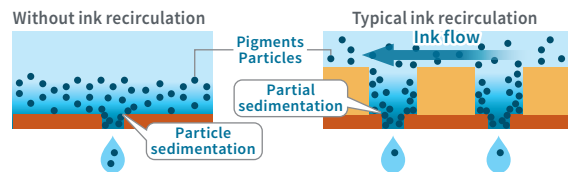


Quality optimized by Fine Adjustment !!



[Image graphics]

Feature of ink recirculation through all channels inkjet head



Stable jetting of higher viscosity and gravity inks, prone to sedimentation in other systems

TOSHIBA TEC ink recirculation



Particles are diffused

- Ink is recirculated through all channels, preventing sedimentation and reducing nozzle blockages drastically.
- Because the ink path is simple, it is excellent at carrying away air bubbles or unwanted particles.

Specifications



CF3 / CF3R

| | 1 colour | 2 colours |
|--------------------------------------|--|---|
| Print method | On-Demand piezo technology | |
| Ink recirculation structure | Ink recirculation through all channels | |
| Print width | 53.95 mm | 53.91 mm |
| Nozzles | 1278 | 639 |
| Nozzle resolution | 600 npi | 300 npi |
| Number of rows | 2 | |
| Nozzle spacing (row to row distance) | 7.94 mm | |
| Greyscale levels | 6 levels/0~5 drops | |
| Drop volume | 20 pL/5 drops | |
| Minimum drop volume | 3~4 pL | |
| Frequency | 9.2 kHz/5 drops | |
| Ink types | UV-curing & oil-based (consult us for compatibility assurance) | |
| Built-in temperature sensor | Included | |
| Head cooling method | CF3: Air-cooling | CF3R: Water-cooling (includes water cooling port) |
| Size, weight | CF3: 96.7 mm(W)× 29.3 mm(D)× 100.7 mm(H), 255 g | CF3R: 96.7 mm(W)× 31.3 mm(D)× 100.7 mm(H), 285 g |

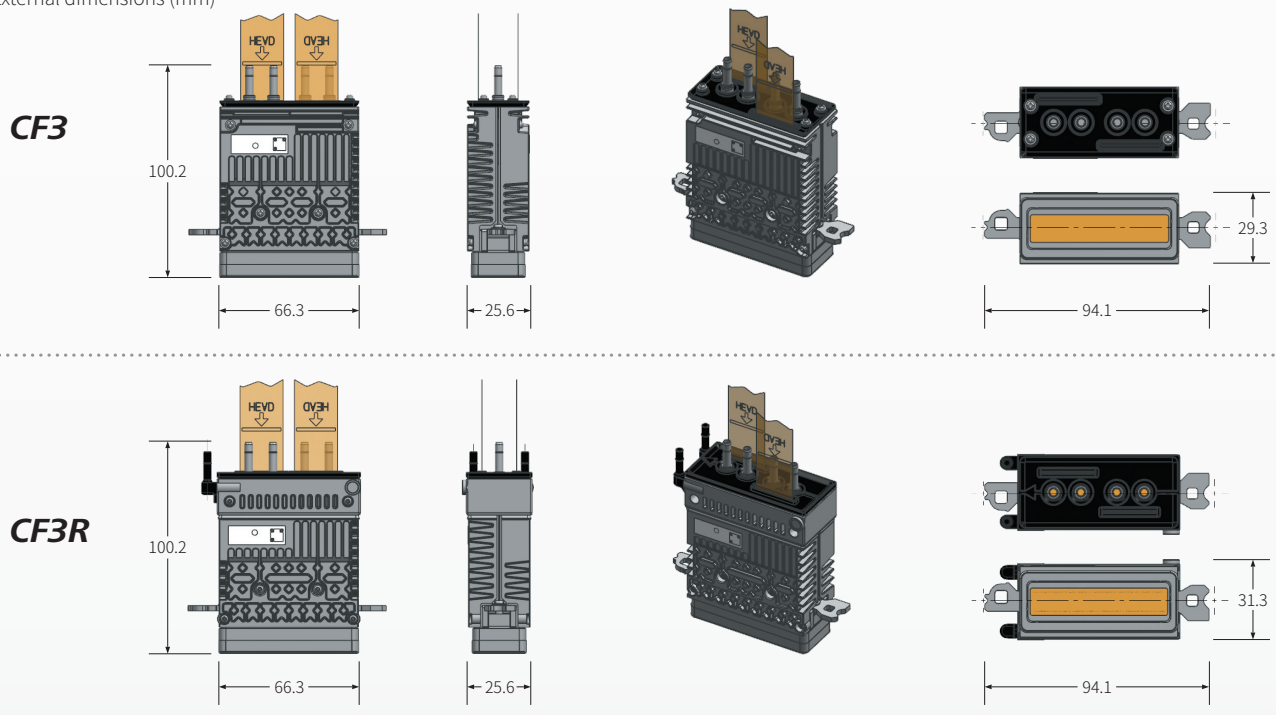
※ CF3 is a native 600 npi head with 1st and 2nd row nozzles laterally offset from each other by 1/600". Dot positions for 2 colors are offset accordingly.

※ Gradation levels and drop volumes depend upon the type of ink used. Maximum printing speed and linear frequency can be increased by reducing the number of drops per dot (dpd).

※ Six different types of power supplies (: 5 V, 24 V, two units of +7 ~ +15 V and two units of -7 ~ -15 V) are required in order to drive head.

※ The specifications above may be modified due to certain circumstances.

External dimensions (mm)



TOSHIBA TEC CORPORATION

Inkjet Business Group

Oval Court Ohsaki Mark East, 2-17-2, Higashi-Gotanda, Shinagawa-ku, Tokyo 141-8664, Japan
<http://www.toshibatec.com/en/products/industrial/inkjet/products/>

