

BC312B

Water-based Dye/Pigment Hybrid Ink

Fast-drying and suitable for coated and uncoated substrates.



- ✓ High-density black formulation for deeper, richer output across varied materials.
- ✓ Extended decap time for consistent output and sharp prints during intermittent operation.
- ✓ Optimized for low-absorption substrates including dense cartons, pharmaceutical boxes, coated paper, and offset stock.

BC312B is a water-based dye/pigment hybrid ink engineered for reliable performance on porous and semi-porous substrates. It dries quickly, offers strong permanence, and maintains excellent darkness and high-resolution print quality on demanding materials such as dense cartons and pharmaceutical packaging. It also delivers higher contrast and sharper barcode edges to improve readability and scanning accuracy.

SUBSTRATES COVERAGE

Glossy Paper

Kraft Paper

Coated Paper

Paperboard
Pharma Box

Envelope

Corrugated Board

HD Carton

Wood

PRODUCT SPECIFICATION

Part Number	BC312B	Cartridge Type: TIJ ink cartridge without the security chip
Ink Type	Aqueous-based Ink	●Black Colorant Type: Dye/Pigment Hybrid Ink
Resolution	Up to 600 dpi (recommended 300x300 dpi)	
Max Print Swath	12.7 mm	
Nozzle Count	300	
Ink Throw Distance	2 -5 mm	
Firing Voltage	11.0-11.8 V	* Please conduct test before use, the suitable parameter may be different depending on the printer
Firing Pulse Width	2.0-2.2μs	
Max. Firing Frequency	12 kHz	
Ink Fill level	42 ml	
Average Delivered Ink	36 ml (Vertical)	31 ml (Horizontal)
Ink Dry Time	1-2 sec (Using a 300×300 dpi horizontal line as an example, with corrugated board as the test material, the actual drying time varies depending on the substrate).	
De-Cap Time	2 Hours and above under normal condition and environment * The actual toleration depends on the surrounding temperature and humidity.	
Operation Conditions	15°C – 35°C; 35% – 80% RH	
Shipping/Storage Conditions	5°C – 40°C; 20% – 80% RH	
Printhead Cleaning	Wipe the printhead with a non-woven cloth; moisten it with distilled or deionized water if needed.	
Shelf Life	12 months from ink filled date	

❖ ATTENTION:

- Please clean the printhead before installing the ink cartridge.
- Use a lint-free dry cloth to clean the ink cartridge and printhead.
- Printing performance may vary based on conditions and environment, please conduct a printing test carefully before use.
- All data here is based on Bentsai laboratory data, not guaranteed.

❖ MAINTENANCE AND HANDLING:

- Use a lint-free cloth wipe the printhead nozzle in a single direction from top to bottom
- If the printhead is clogged, gently wipe it with a lint-free cloth moistened with deionized or distilled water and do not use alcohol or cleaning agents on aqueous ink cartridges.
- Hold the cartridge printhead face down, gently press the printhead on a lint-free cloth to let the ink flow out, and then carefully and lightly wipe across the printhead along the edge.
- After use, seal the printhead with the originally attached cartridge clip and store the cartridge with the position of its printhead UP until subsequent use.

❖ SHIPPING AND STORAGE:

- The ink cartridge should be stored with the originally attached clip in a vacuum-sealed pouch until used
- Please store the cartridge with the printhead facing upwards. If it is still in the original sealed carton, store it according to the markings.
- Use the cartridge within two weeks of removing it from the vacuum-sealed pouch for best performance.
- Refer to Safety Data Sheet for more information.



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