

Long Throw Single-Use Solvent Cartridge

Key Specifications

- Up to 1/2" (12mm) throw distance*
- Single-use
- · Single-color
- Heavy solvent-compatible
- 1/2" (13.5mm) print swath
- 300 DPI
- Drop mass: 40-45pl*
- 6 kHz per nozzle*

Key Applications

- Canning
- Bottling
- Round/curved surfaces
- Recessed surfaces
- Area of poor product control
- Variable/uneven product thickness
- Non-porous substrates

Contact Us

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About

With an industry-leading up to ½" throw distance, Zion nearly doubles the throw distance of the competition. This disposable monochrome solvent cartridge contains 320 nozzles for up to a ½" print swath capable of printing high-resolution text, barcodes, and graphics on non-porous and semi-porous substrates.

The long throw distance makes Zion perfect for applications where uneven, recessed, or round surfaces are part of the product packaging. In the case of poor product control, the longer throw distance ensures crisp marks when substrate positioning can vary significantly.

On chip READ/WRITE memory ensures that only approved inks are utilized in OEM partner machines.

Target Customer

The ideal customer:

- Utilizes semi and non-porous substrates
- Relies on heavy solvents in the printing process
- Runs small-to-medium production batches
- Requires fast ink changeout

Print Speed Table

6 kHz Print Speed Translation						
Horizontal	Max. Line Speed*	Max. Line Speed*	Sample Print Image			
DPI	(Single Channel)	(Dual Channel)	(Simulated)			
300	100 ft/min	150 ft/min	1 234567 890128			
	(~31 m/min)	(~45 m/min)	Funai 300 DPI Printing			
150	200 ft/min	300 ft/min	1 234567 890128			
	(~61 m/min)	(~91 m/min)	Funai 150 DPI Printing			
75	400 ft/min	600 ft/min	1 234567 890128			
	(~122 m/min)	(~183 m/min)	Funai 75 DPI Printing			

Powered By Funai

Funai focuses on research and development of thermal inkjet microfluidics for specialty printing, life sciences, and consumer applications. With hundreds of printing-related patents, Funai is recognized as a top-tier microfluidic designer and manufacturer with scaling capabilities to partner with global industries.



ZION

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Model	Funai Model No: F3****		
Environmental Protection	RoHS / REACH		
Printable Images	Text Barcodes Graphics		
Ink Capacity	Ink fill (avg) 46ml* Deliverable ink (avg) 42ml*		
Nozzles	320 (two rows of 160)		
Heater Pitch	300 DPI		
Print Swath	0.53" (13.5mm)		
Firing Frequency	6 kHz per nozzle*		
Pen Stall	Shetland/Clydesdale		
Nozzle Sealing Method	Nozzle Clip		
Reservoir Type	Foam		

Useage

Working Location	Indoor		
Working Temperature	15C-35C (~60F-95F)		
Working Humidity	8%-80% (non-condensing)		
Compatible Solvents	MEK Acetone Ethanol		
Ink Properties	PH Surface Tension (dynes/cm) Viscosity (cP) Particle Size (nm)	7-8 24-45 2-10 111.00	
Filling Method	Vacuum Filler (LOBOZAR TEC	Vacuum Filler (LOBOZAR TECHNIK)	
Drop Size	40-45pl*	40-45pl*	

Dimensions and Storage

Size(mm)	28.8(W) x 73.9(H) x 66.5(D)	
Weight	31g	
Storage Temperature (empty)	15C~50C (~60F-120F)	
Storage Temperature (filled)	15C~35C (~60F-95F)	
Storage Humidity (filled)	5%-80% (non-condensing)	
ATM Pressure	<1609 (~5280ft)	















