# C9series—Variable Frequency Digital Controllers

### **Digital Control Revolutionizes Parts Delivery**

A revolutionary digital controller series for use with regular parts feeders for conveyance of parts of all sizes. Auto-tuning function eliminates need for frequency adjustment, and convenient digital settings and displays, etc. allow parts feeders to operate to their full potential.



#### **Features**

#### Auto-tuning function eliminates need for frequency adjustment

This digital system has an advanced frequency autotuning function. It automatically tracks resonance point changes resulting from mechanical? changes over time, regardless of changes to the volume of workpieces, to deliver optimal vibration at all times. There is no need for leaf-spring adjustments, and even frequency adjustment is unnecessary. This keeps the equipment activated much more of the time and saves energy.

## Digital setting/display makes settings easy to manage

Amplitude, drive frequency, output voltage notches are all set and displayed digitally, making them easy to manage.

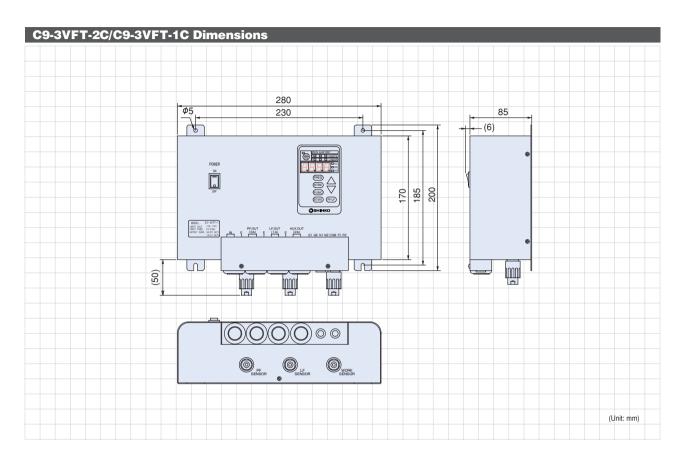
### Constant amplitude control matched to workpieces

With digital setting of amplitude, an amplitude detection sensor allows drive at a constant amplitude suited to the workpieces under conveyance.

### Complete control possible with a single controller

Control of both a parts feeder and linear feeder is possible with a single controller.

- •Soft start settings can be adjusted up to 4 seconds
- On-off delay time can be adjusted up to 60 seconds
- Changes to button labels
- Changes to function displays
- Case color changed to that of C10 series



#### **Specifications**

Model			C9-3VFT-2C	C9-3VFT-1C
Input Power source			AC200/220V ±10%, 50/60Hz	AC100/110V ±10%, 50/60Hz
Control system			PWM system	
	Voltage		0∼190V	
Output	Vibration frequency	Parts feeder	40a 00Hz 65a 120Hz	90∼180Hz 180∼360Hz
		Linear feeder	49 9002 00 12002 90 16002 160 360002	
	Maximum current	Parts feeder	3A	
		Linear feeder	1A	
Operating modes	Auto-tuning mode		Resonant frequency auto-tuning allows constant amplitude control with no need for frequency setting	
	Constant amplitude mode		Constant amplitude control at set frequency	
	Constant voltage mode		Frequency, output voltage set manually	
Additional features	Quick removal function		Temporary increase in PF amplitude to clear leftover workpieces, etc.	
	Speed selector		Selection of amplitude settings (up to 4) by means of external signal	
	Start/Stop control		Start/stop control by external signal	
	Output signal		Outputs signal tuned to parts feeder operation	
	Soft start		Start-up time 0.2~4.0 seconds	
	On/Off delay timer		Delay time 0.2~60.0 seconds	
	Sensor power source		3P power plug gives DC12V, max. 80A	
	Function		Power source output tuned to parts feeder operation (RUN)	
Tuned power	Control system		ON/OFF control by Triac	
source output	Output voltage		As power source input to controller	
	Maximum current		2A	
	Noise tolerant voltage		Above 1000V	
Conditions for use	Ambient temperature		0~40°℃	
	Ambient humidity		10∼90% (no condensation)	
	Case color		Japan Paint Industry Association U75-70D	
	Weight		2.3 kg	
Our compatible Parts feeders			EA-15/20/25/30/38/45, ER-25B/30B/38B/45B	
Our compatible Linear feeders			LFBR-350/450/600, LFB-300/400/550, LFG-400/550/700	

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