# R Series Automated Dispensing Systems

Easy 4-axis automation for precise fluid application with Teach Pendant programming



R Series makes 4-axis dispensing automation easy.



Teach Pendant simplifies setup and programming with EFD's proprietary dispensing software.

Nordson EFD's R Series 4-axis automated systems are configured for precise fluid dispensing using EFD syringe barrel and valve systems.

The R Series includes an easy-to-use Teach Pendant with proprietary TeachMotion™ software specialized for market-leading repeatability and accuracy in fluid placement and positioning. Integrated commands allow users to program complex dispensing patterns in minutes. True three-dimensional motion control provides easy programming of dots, lines, circles, arcs, compound arcs, and patterns on different planes. The fourth axis allows for dispensing at any angle along the 360° rotation plane.

Other features include single point needle adjustment and best-in-class dispense repeatability at +/- 8  $\mu$ m. Platforms range from 300 x 300 mm to 620 x 500 mm, making them an ideal solution for batching or critical dispensing applications.

The R Series can work as a standalone system or as a key part of an automated solution. It is easy to integrate into inline transfer systems, rotary tables, and pallet assembly lines.

### **Features**

- Simplified setup and programming via Teach Pendant
- Easy USB file upload and download
- Built-in tip recalibration sequence for easy tip change alignment
- True, three-dimensional motion control
- 360° rotation for ID and OD dispensing
- Simultaneous X and Y movement during R (rotation) for true point programming
- Rugged, reliable construction and small footprint
- Wide range of work envelopes

#### **Benefits**

- Market-leading dimensional positioning accuracy and deposit placement repeatability
- Faster cycle and batch times
- · Easier to setup and program quickly
- · Seamless integration into any manufacturing operation
- Reduced production, material, and ownership costs
- New manufacturing opportunities





# **Specifications**

Item / Model	R3	R4	R6
Part #	7361912	7361914	7361916
Part # Europe*	7361913	7361915	7361917
Number of axes	<b>←</b>	4 axes	<b></b>
Maximum working area (X / Y / Z / R°)	300 / 300 / 150 mm / ±999° (12 / 12 / 6" / ±999°)	400 / 400 / 150 mm / ±999° (16 / 16 / 6" / ±999°)	620 / 500 / 150 mm / ±999° (24 / 20 / 6" / ±999°)
Workpiece payload	≺	10.0 kg (22.0 lb) ———————————————————————————————————	<del>-</del>
Tool payload	<b>←</b>	3.0 kg (6.6 lb)	<del></del>
Weight	41.0 kg (90.4 lb)	46.0 kg (101.4 lb)	52.0 kg (114.7 lb)
Dimensions	490w x 901н x 519d mm (19w x 35н x 20d")	590w x 901н x 619p mm (19w x 35н x 24p")	810w x 901н x 619d mm (32w x 35н x 24d")
Maximum speed (XY / Z)	<b>←</b>	800 / 320 mm/s — (31 / 13"/s)	<b></b>
Maximum speed (R°)	<b>←</b>	720°/s —	<del>-</del>
Drive system	<b>←</b>	3-phase micro-stepping motor	<b></b>
Memory capacity	<b>←</b>	— 1-99 programs / 1-9,999 points per program —	<b></b>
General purpose I/O	<b>←</b>	8 inputs / 8 outputs	<b></b>
Input AC (to power supply)	<b>∢</b> ———	——— 100–240 VAC, ±10%, 50/60Hz, ———— 20 Amp maximum, 320 W	<b></b>
Repeatability (XY / Z)**	<b>←</b>	±0.008 mm / axis —	<b></b>
Repeatability (R°)**	←	±0.005°	<del>-</del>
Teach Pendant		Included —	
Tip alignment	<b>←</b>	Optional —	<del>-</del>
Approvals	<b>←</b>	CE, RoHS, WEEE, China RoHS	<b></b>
Warranty	←	1 year, limited	<b></b>

<sup>\*</sup>Complies with European safety regulations.

## **PRO Series**

EFD's PRO Series includes smart vision CCD camera and laser height sensing capabilities for a fully integrated dispensing solution.



## **Free Process Evaluation**

Contact Nordson EFD to configure an automated dispensing system that meets your specific needs.

- A complimentary process evaluation by experienced fluid dispensing experts
- Samples processed for customer evaluation and approval prior to purchase



For Nordson EFD sales and service in over 40 countries, contact Nordson EFD or go to www.nordsonefd.com.

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<sup>\*\*</sup>Repeatability results may vary depending on method of measurement.