

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 $\pm 8 \mu\text{m}$. 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 in-line 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



more info

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R Series Specifications

Item/Model	R3	R4	R6
Part #	7361912	7361914	7361916
Part # Europe*	7361913	7361915	7361917
Number of axes	4	4	4
Maximum working area (X / Y / Z / R°)	300 / 300 / 150 mm / ±999° (11.8 / 11.8 / 5.9" / ±999°)	400 / 400 / 150 mm / ±999° (15.7 / 15.7 / 5.9" / ±999°)	620 / 500 / 150 mm / ±999° (24 / 19.7 / 5.9" / ±999°)
Workpiece payload	10 kg (22.0 lb)	10 kg (22.0 lb)	10 kg (22.0 lb)
Tool payload	3 kg (6.6 lb)	3 kg (6.6 lb)	3 kg (6.6 lb)
Maximum speed (XY / Z)	800 / 320 mm/sec (31 / 13"/sec)	800 / 320 mm/sec (31 / 13"/sec)	800 / 320 mm/sec (31 / 13"/sec)
Maximum speed (R)	720 deg/sec	720 deg/sec	720 deg/sec
Unit weight	41 kg (90 lb)	46 kg (101 lb)	52 kg (115 lb)
Dimensions	490W x 517H x 900D mm (19"W x 20"H x 35"D)	590W x 625H x 900D mm (23"W x 25"H x 35"D)	730W x 810H x 900D mm (29"W x 32"H x 35"D)
Drive system	3-phase micro-stepping motor	3-phase micro-stepping motor	3-phase micro-stepping motor
Memory capacity	1–99 programs 1–9,999 points per program	1–99 programs 1–9,999 points per program	1–99 programs 1–9,999 points per program
Data storage	USB	USB	USB
General purpose I/O	8 inputs / 8 outputs	8 inputs / 8 outputs	8 inputs / 8 outputs
Drive method	PTP and CP	PTP and CP	PTP and CP
Dispensing controller	External	External	External
Power supply	Auto-switching, AC100–240V, 320 W	Auto-switching, AC100–240V, 320 W	Auto-switching, AC100–240V, 320 W
Interpolation	4 axes (3D space)	4 axes (3D space)	4 axes (3D space)
Repeatability (XY / Z)**	±0.008 mm / axis	±0.008 mm / axis	±0.008 mm / axis
Repeatability (R°)**	±0.005	±0.005	±0.005
Working temperature	10–40° C (50–104° F)	10–40° C (50–104° F)	10–40° C (50–104° F)
Teach Pendant	Included	Included	Included
Approvals	CE, RoHS, WEEE, China RoHS		

* Complies with European safety regulations.

** Repeatability results may vary depending on method of measurement.

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

PRO Series

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



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

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