

PROX Series Automated Dispensing Systems

Advanced 3-axis automation with a linear motor for longevity and economy



The PROX Series is powered by a contactless linear motor that improves actuation speed and reduces maintenance needs.



The PROX solution offers DispenseMotion software, integrated vision and laser height detection, and repeatability of ± 0.003 mm / 3 μ m.

Part #	Description
7366455	3-axis PROX5 robot
7366456	3-axis PROX5 robot - Europe
7361240	Laser B upgrade kit
7364992	Laser C (confocal) upgrade kit

Note: Order laser separately.



more info

Nordson EFD's 3-axis PROX automated dispensing systems are specifically designed and configured for precise fluid dispensing using EFD syringe barrel and valve systems.

The PROX Series is powered by a contactless linear motor, offering improved actuation speed, fewer moving parts, and reduced maintenance needs due to significantly lower wear and tear. It is ideal for applications in electronics, life science, and clean room environments.

In addition, the PROX Series robot features the same features as our PRO and PROPlus Series robots including specialized DispenseMotion™ software, integrated vision and laser height detection, and best-in-class X, Y, and Z-axis repeatability of ± 0.003 mm / 3 μ m.

Features

- Contactless linear motor for improved actuation speed
- Simplified setup and programming
- Larger working area of 450 mm x 500 mm
- Constant closed-loop feedback
- Optional laser for automatic dispensing gap adjustment and post dispensing verification using AOI

Benefits

- Best-in-class X, Y, and Z-axis repeatability and speed at ± 0.003 mm / 3 μ m
- Linear motor is more economical to operate, reduces maintenance, and offers improved durability
- Easy integration into existing manufacturing operations
- Faster speed for higher product output



Specifications

Item	Specification
Number of axes	3
Maximum working area (X / Y / Z)	450 / 500 / 100 mm (18 / 20 / 4")
Workpiece payload	15.0 kg (33.6 lb)
Tool payload	3.5 kg (7.7 lb)
Weight	76 kg (167.6 lb)
Dimensions	920.0 _w x 790.0 _D x 737.0 _H mm (36 _w x 31 _D x 29 _H ")
Maximum speed* (XY / Z)	800 / 250 mm/s (31 / 10"/s)
Drive system	XY axes: Contactless linear motor Z axis: 5-phase micro-stepping motor
Memory capacity	PC storage
General purpose I/O	8 inputs / 8 outputs (16 / 16 optional)
Input AC (to power supply)	100–240 VAC (±10%), 50/60 Hz, 20 A maximum, 450 W
Repeatability**	±0.003 mm/axis
Vision	CCD smart camera
DispenseMotion software	Included
Tip detection	Included
Laser height detection	Optional
Approvals	CE, UKCA, RoHS, WEEE, China RoHS
Warranty	1 year, limited

*Actual travel speed depends on the dispensing path and workpiece / tool payloads.

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

Laser Comparison

Item	Laser B (IL-030)	Laser C (CL P030)
Reference (measurement) distance	30 mm (1.18")	30 mm (1.18")
Measurement range	±15 mm (±0.59")	±5 mm (±0.20")
Laser class	1	1
Spot diameter	200 x 750 µm	ø38 µm
Linearity	±5 µm	±0.72 µm
Repeatability	1 µm	0.25 µm
Sampling rate	0.33 / 1 / 2 / 5 ms	0.1 / 0.2 / 0.5 / 1 ms
Surface	All except reflective, transparent, and translucent surfaces	All

Smart Vision

- Precise repeatability with powerful CCD camera
- Higher product quality and throughput

All PROPlus / PRO Series systems include a CCD camera that converts pixels to digital values to deliver precise, high-quality images. The software confirms workpiece presence and placement and automatically adjusts as in-process variations occur.

Free Process Evaluation

Contact Nordson EFD to configure an automated dispensing system that meets your specific needs, with:

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



EFD

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

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