

PC56 Pattern Control



High-speed programmable pattern control delivers precise adhesive placement at line speeds exceeding 2000 feet per minute.

The Nordson® PC56 Pattern Control is the newest addition to the PC50 Series. This family of controls uses advanced microprocessor technology to provide high-resolution, precise pattern deposition. Controls can function independently or be interfaced to PLCs in larger automated systems.

The Model PC56 is designed for high-speed applications which require precise adhesive placement control and product position or placement monitoring. The PC56 performs easily at line speeds exceeding 2000 ft/min.

The PC56 offers product skew and overlap protection to minimize waste in applications such as straight-line folder gluing.

The PC56 is easy to install.

The PC56 is configured for ease of installation and simple setup. It is available in a NEMA-12 enclosure with power supply and is shipped fully assembled and ready for mounting and wiring. The PC56 is also available in modular form for custom installation in a parent machine.

Features and Benefits

- Multi-turn resolver line-speed tracking allows for wide variations in product size and position without special gearing.
- Unique setup counter simplifies initial setup and programming by allowing measurement of product length and distance through the controller.



- Memory trigger feature allows tracking of up to 14 products simultaneously, enabling flexible photo sensor installation.
- +0/-1 mm accuracy at 2000 ft/min (610 m/min) meets the most demanding high-speed application requirements.
- 50 microsecond response time provides exceptional accuracy for high-speed production lines such as folder gluers.
- Up to seven independent output channels handle complex patterns.
- 32 program memories store patterns for fast changeovers.
- Two levels of security password protection guard against unauthorized adjustments.
- Run-up output controls pneumatic piston pumps, pressure regulators or spray air.
- Product length fault detection identifies skewed or overlapped product preventing improper gluing. A dedicated output can be used to activate warnings and/or reject.
- Fast adhesive bead volume adjustment helps achieve optimum adhesive deposition.
- Product counter records pieces produced.
- Programmable trigger disarm capability helps distinguish between leading edge of product and product window.
- False trigger recognition prevents misfiring at scrap.
- Easy-access gun purge feature allows for fast purge of each gun channel.
- Enhanced rate display reads in either line speed or products per minute.
- Standard serial communication port allows memory upload/download through any standard PC.
- Modbus communication capability allows interface with machine controls through standard industrial interface protocols.

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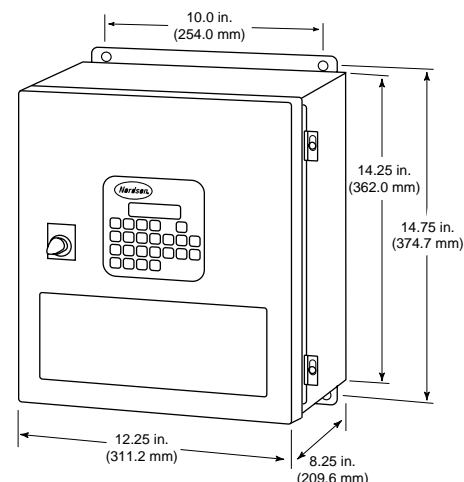


Serial communications option allows program upload/download and remote controller operation.



Modular components offer installation flexibility.

Dimensions



Specifications

Maximum Line Speed: 2000 ft/min (610 m/min)

Accuracy: +0 / -.040 in @ 2000 ft/min
(+0 / -1 mm @ 610 m/min)

Line Speed Transducer: Multi-turn resolver

Operation:

Response Time: 50 μ Sec

Position Resolution: 12 bits - 4096 increments, maximum

Gun Compensation: Leading/trailing edge, 0.1 msec steps,
each output independent

Program Memories: 32

Inputs/Outputs:

1 trigger input

Up to 8 output modules*

1 run-up output

1 skew/overlap fault output

*Output modules may be any mix of AC, DC and one analog.

Run-up Output:

Output Type: 4-20 mA or 0-10 VDC, proportional to RPM (line speed)

Resolution: 12 bit

Update Frequency: 100 msec

Input Electrical:¹

Primary power supply input: 110/240 VAC 50/60 Hz

Controller-only input: 20-30 VDC

Mounting:

Complete Assembly: See diagram

Weight: (complete assy): 30 lb (13.6 kg)

Controller only: EN-50035 ("G" profile) or
EN-50022 ("Top Hat" profile) DIN rail.

Keypad/Display only: May be mounted up to 1000 ft (305 m) from controller.

Serial Communication:

RS232/RS435; 4800, 9600, 19.2K, 38.4K Baud Rate

Approvals:

UL, CE

Notes:

1. Current power supply requirement is determined by the number of gun solenoids to be activated and their collective requirements.

Specifications subject to change without notice.



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