



# Controlled Pressure (CP) Gun

*Controlled pressure gun provides flexibility and precision dispensing for improved quality, productivity and efficiency.*

The Nordson® Controlled Pressure (CP) Gun is specially designed for robotic application of automotive adhesive and sealant materials. Its simple design and convenient operation make it ideal for use where closely-controlled adhesive or sealant deposition is required.

The CP gun combines a precision regulator with production-proven Nordson Auto-Flo™ on/off dispense valve for maximum performance in dispensing adhesives or sealers in extrude, stream or swirl patterns. The compact, lightweight CP gun can be mounted on the wrists of most commercial robots.

## Auto-Flo Dispense Valve

- The Auto-Flo dispense valve is an on/off automatic gun specially designed for applications requiring high-pressure dispensing at high flow rates.
- Ideal for dispensing heated and cold-applied, high-viscosity adhesives and sealants, the high-performance Auto-Flo dispense valve provides uniform material deposition, precise material placement flow control, and clean material cut-off.
- The Auto-Flo dispense valve can handle working pressures up to 5,000 psi. An “air actuated to open” feature provides full flow in all applications. A spring-closed with “air-closed” option prevents leaking under high pressures.



## How it Works

- The CP gun adjusts material flow in proportion to robot speed. The gun reacts to a signal from the robot controller, which is proportionate to robot velocity.
- An air pressure proportioning valve controls the CP gun’s precision regulator. An analog signal from the robot tells the precision regulator to increase material flow as the robot accelerates, and decrease as the robot decelerates along its programmed path.
- Air pressure from the proportioning valve determines material pressure of the Auto-Flo dispense valve. This provides precise flow control, with better adhesive deposition profiles and faster cycle times.
- Material enters the regulator and moves through the control valve, filling the bottom of the regulation chamber. During a dispense cycle, the control valve balances pneumatic and hydraulic force for controlled output pressure to the Auto-Flo dispense valve, automatically eliminating pressure winks or peaks.
- The CP gun is available in heated or temperature-conditioned configurations.

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### Application Versatility

To accommodate new parts, part styles, sheet metal tolerance or part nesting, the CP gun easily integrates into dispensing systems that require maximum flexibility in changing dispense patterns to:

- extrude material for closely controlled adhesive deposition and consistent bead profiles
- stream the material to avoid the risk of a dispensing nozzle touching or dragging a part
- swirl the material to save material costs and minimize sagging.



### Specifications

#### Precision Regulator

##### Dimensions

Height: 6.0 in.  
Width: 4.0 in.  
Depth: 4.0 in.

##### Weight

5.9 lbs.

#### Precision Regulator with Auto-Flo Module

##### Dimensions

Height: 6.0 in.  
Width: 4.0 in.  
Depth: 6.0 in.

##### Weight

6.7 lbs.

Can be mounted in left or right hand configuration.

### Features and Benefits

- **Dispenses wide range of materials** for increased application flexibility.
- **Compact, lightweight design** provides easy installation and service, and allows mounting on most commercial robots.
- **Dispenses heated or cold materials** with viscosities up to 3,000,000 cps at working pressures up to 5,000 psi.
- **Auto-Flo dispense valve's replaceable seal cartridge** allows easy, on-line repair and maintenance.



Nordson reserves the right to make design changes to products to improve their function. These changes may occur between printings.

*For more information, talk with your Nordson representative or contact your Nordson regional headquarters office.*

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