

The automotive electronics market manufactures diagnostic devices and controls for passenger vehicles, trucks and buses. These devices can include control modules, switches, connectors, sensors, coils, and wire harnesses.

Because many elements within these devices are sensitive and fragile, they need protection from vibration and environmental contaminants such as dirt or oil.

Graco equipment dispenses both single-component and plural-component reactive resins (epoxies, silicones and urethanes) used for potting, encapsulating, sealing, vibration dampening, and overmolding of electronic printed circuit boards and connections.

For dispensing lubricants

For lubricants, [Graco 1052/1053](#) positive displacement valves are used for material volumes less than 3.6 cc's. [Graco 1092/1093](#) valves are used for material volumes less than 14 cc's.

For dispensing single-components sealants

Formed-in-place gasketing is generally achieved with a single-component room temperature vulcanizing (RTV) silicone. The RTV silicone is applied to the perimeter of an electrical enclosure with a [Graco Dispensit 710](#) or [715](#) time pressure valve which is fed by a [Graco Supply System](#) – either a 5 or 55 gallon ram.

For more accuracy and bead control on smaller output applications, a programmable [Dispensit 1053](#) or [1093](#) dispense valve might be used to assure repeatable volume on each part.

For larger output applications, a [Graco PCF Metering System](#) might be used. In all cases, the dispense valve and feed system are integrated with either a cartesian or 6-axis robot.

For dispensing two-component materials

For two-component materials used for sealing, potting, and encapsulating, the [Graco PD44](#) Meter, Mix and Dispense Valve is used for shot sizes from 0.005 to 5 cc's. The [Graco PR70](#) Meter, Mix and Dispense System is used for shot sizes from 1 to 70 cc's. The [Graco HFR Metering System](#) is used for shot sizes over 70 cc's.