

### Dispensed-Foam-In-Place Gasket Applications

#### DESCRIPTION

A Dispensed-Foam-In-Place (DFIP) gasket is normally created by applying a two-part liquid silicone material to create a dispensed-in-place compression gasket in applications that require low sealing force. DFIP gaskets replace many traditional engineered die-cut gaskets which also may require an adhesive film layer.

#### AUTOMOTIVE and GENERAL INDUSTRY APPLICATIONS

Typically the dispensed silicone product is thixotropic for reduced flow and has many benefits for the product manufacturer and user. Uses include sealing automotive components such as watershield panels placed inside doors, exterior lighting, motor covers and serviceable components such as tail lamp lens. After leaving the nozzle the liquid silicone expands and cures to form an elastomeric foam gasket in a matter of minutes.

#### METER MIX and DISPENSE EQUIPMENT

Material manufacturers recommend Positive Displacement Metering (such as Positive Rod Displacement) and motionless mixing devices (such as Static Mixers) for repeatable dispensing results. Many silicone foam products require a 1:1 mix ratio by weight.

#### APPLICATION ONTO THE PART

To obtain a consistent and uniform foam bead the mixed foam should be applied using a suitable robot, XYZ table or other motion device. Sealant Equipment & Engineering provides complete dispense systems for integrated applications with automation devices.

#### FOAM GASKET PROPERTIES and BENEFITS

Closed cell, self skinning, low durometer, near-zero water absorption, excellent rebound, excellent chemical resistance, excellent temperature resistance, no solvent flushing required. Contact us for more information.



Dispensed-In-Place Silicone Foam Gasket applied onto Automotive Watershield Panel

For More Information visit [www.SealantEquipment.com](http://www.SealantEquipment.com)  
Go to Meter Mix Dispense Equipment/Servo-Flo 302 and Dispense Valve Catalog page 7

#### Typical Engineered System Features:

- Servo-Flo 302 Servo-Drive Metering Assembly
- Control Panel Assembly with Operator Interface
- 2-Part Dispense Valve: Snuf-Bak or No-Drip
- Mixer and Metal Shroud: Extruding Foam bead
- 2-Part Supply Pumps with Pump Controls
- Hoses Selected for Flow Rate and Mix Ratio

#### Available Features:

- Supply Pumps with Automatic Crossover Control
- Integrated Material Temperature Control System
- DeviceNet Interface of entire dispensing system
- Robot Integration and Engineering Services
- Robot Tooling & Dress-Out Design and Assembly
- Robot Cell Bead Path Programming

# 2-Part Foam Gasket Applications



Automotive Watershield Panel with DFIP Gasket applied on perimeter of a Right Hand ABS panel



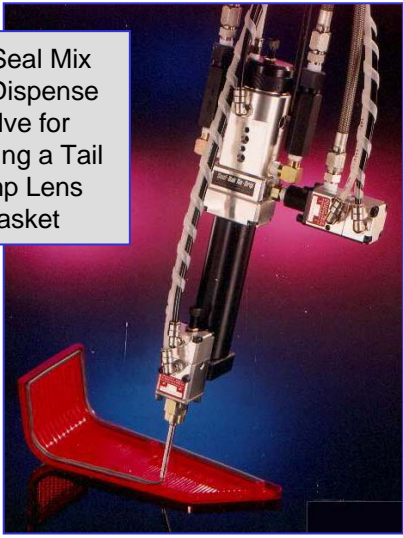
Close-up showing intricate bead path and consistent bead profile

Servo-Flo 302 Positive Displacement Meter Mix and Dispense System



Side view showing intricate bead path and consistent bead profile

Tip-Seal Mix and Dispense Valve for applying a Tail Lamp Lens Gasket



Form DFIP Gasket-001



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