

# Injectors–Throttle Body Injection (TBI) Multec Bottom Feed

## Description:

The Bottom Feed TBI Injector is a precision device which accurately meters fuel to meet environmental and functional requirements of TBI engines. The Multec TBI is a solenoid operated valve that uses a spherical ended armature along with a conical seat. Metering is controlled by a 6-hole orifice just below the valve. The six streams merge to form a full, finely atomized cone.

## Typical Application:

This injector is designed to meet the requirements of Throttle Body Injection engines.

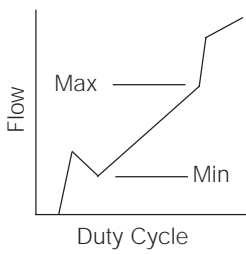
## Performance Advantages:

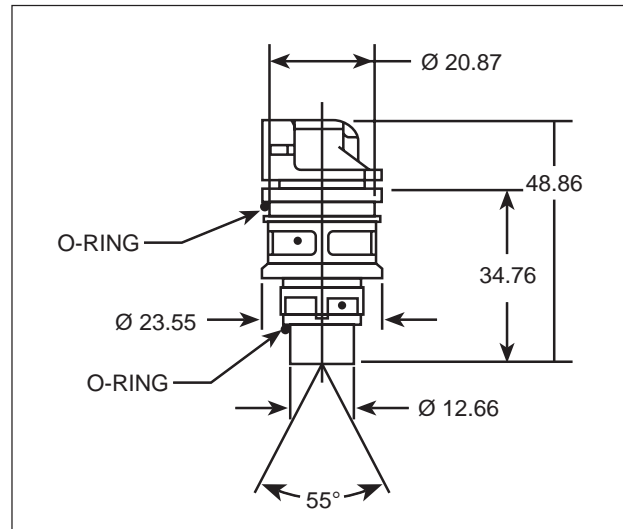
The Bottom Feed TBI Injector provides for accurate metering when energized and excellent sealing when de-energized.



Features	Benefits
<ul style="list-style-type: none"><li>• Accurate metering from - 40°C to 110°C</li></ul>	<ul style="list-style-type: none"><li>• Variety of flow rates available to get optimum engine performance</li></ul>
<ul style="list-style-type: none"><li>• High and low impedance models available</li></ul>	<ul style="list-style-type: none"><li>• Reliable performance under normal engine operating conditions</li></ul>
<ul style="list-style-type: none"><li>• Available in a variety of flow rates</li></ul>	<ul style="list-style-type: none"><li>• Extra filtering protection</li></ul>
<ul style="list-style-type: none"><li>• High and low fuel pressure applications</li></ul>	<ul style="list-style-type: none"><li>• Compatible with up to 100% alcohol blends</li></ul>
<ul style="list-style-type: none"><li>• Flow-thru design with integral fuel filter</li></ul>	<ul style="list-style-type: none"><li>• Fully atomized spray cone for better performance</li></ul>
<ul style="list-style-type: none"><li>• 6-hole orifice</li></ul>	<ul style="list-style-type: none"><li>• Improved cold weather starting</li></ul>
<ul style="list-style-type: none"><li>• Excellent closed valve sealing</li></ul>	<ul style="list-style-type: none"><li>• Fast engine starting</li></ul>

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Performance Specifications:	
Capacity Flows	4.16, 4.54, 5.04, 5.31, 5.82, 6.31, 6.93, 7.46 g/s
Test Fluid Density	0.788 g/cc
Fuel Pressure	75 or 200 kPa
Part-to-Part Flow	+/- 2.0% @ 2.5 ms P.W. /30.0 ms Period
Drive Circuit	4 A/1 A Peak/Hold Circuit
Resistance	1.5 $\Omega$ or 1.8 $\Omega$
Pull-In/Drop Out Current	1.1 A/0.5 A
Linear Flow Range (LFR)	12.0:1 @ 70 kPa 15.0:1 @ 200 kPa
LFR = Max/Min	 <p>The graph plots Flow on the y-axis against Duty Cycle on the x-axis. Two lines are shown: 'Max' and 'Min'. The 'Max' line starts at a low flow, rises sharply, and then levels off. The 'Min' line starts at a low flow, rises slightly, and then levels off at a lower flow rate than the 'Max' line.</p>
Fuel Compatibility	Gasoline – Ethanol: 10%, 20%, 100% Methanol: 15% Alcohol blends require design upgrades



All measurements in millimeters.

Delphi Website:  
<http://www.delphiauto.com>

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