

FUEL METERING

We not only make our own complete line of metering equipment, but keep many other brands in stock. We carry all three basic types: Constant Flow, EFI, and Lucas Mechanical. We can set up any brand of manifold to work with any type or brand of metering. We are glad to supply any separate components you need, or take your pieces and fit them into a complete system. We service fuel systems for engines with any number of cylinders or rotors, from lawn mower engines to blown alcohol.

Flow Test and Calibration Service for Constant Flow, EFI, and Lucas:

We offer flow testing to qualify each component, then a detailed calibration of the overall system tailored to the particular engine combination, fuel, and use. Having calibrated thousands of systems, we have the experience necessary to get the fuel curve very close just as the unit is bolted on. We also offer this service and reconditioning for other brands, new or used.

1) **Constant Flow Metering** Used for many applications as it is very versatile, relatively inexpensive and the most rugged and reliable. We can supply components and systems to meter any type of fuel for any application. We can take a basic system of any brand and add extra components and metering circuits to it to make it perform better for a particular use.

A) **Nozzles:** We make nozzles for gasoline, alcohol, and nitromethane for use on normally aspirated (unblown), supercharged, and turbocharged engines. All Kinsler nozzles are flow tested at *four* pressures, matched, then stamped with a flow code, see [Page 31-M](#).

B) **Precision Distribution Barrel Valves:** The Kinsler line of barrel valves have been developed with spools that are computer contoured to give proper metering for part throttle operation. Other brands have no more than a simple ramp. We also make custom cut and flow tested spools to solve tough part throttle problems for your new or used units, see [Page 38-M](#).

Most barrel valves are made by simply drilling the fuel inlet hole down from the top until it intersects the nozzle hose outlet holes that are drilled in from the side. These intersections are not only quite jagged, but the velocity of the fuel is too high to make the sharp turn out to the nozzle hoses. All of this creates great turbulence, which gives very poor fuel distribution. Kinsler barrel valves are made with a large cavity in the bottom, so the fuel can slow down and make the turn. We also do a careful job of deburring the inside of the cavity, as well as making the inlet to the nozzle hose fitting nicely radiused. This all results in excellent fuel distribution.



Barrel valve mounted to a bracket attached to the manifold. This keeps the barrel valve off the hot valley plate.



Optional 16-port barrel valve with nozzle hoses: allows the use of down nozzles and manifold port nozzles at the same time; or two nozzles in the manifold, ramtube, etc.



Xtra-Light barrel valve, hard anodized aluminum. Cuts weight of the barrel valve in half... saves 1/4 pound.

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