

## General Aviation Aircraft

This line of general aviation aircraft are designed for the needs of the most distinguished and demanding air travelers. With seating for four and a range of 925 nautical miles and cruising speed of 200+Kts at 25,000', this aircraft offers great flexibility for the most discerning pilots.



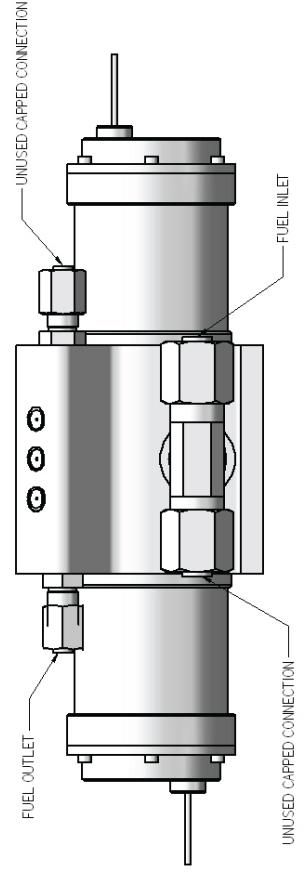
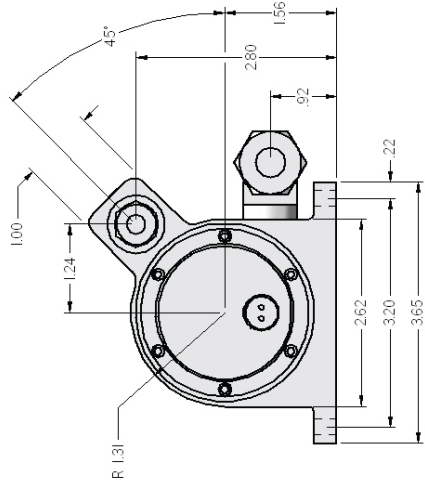
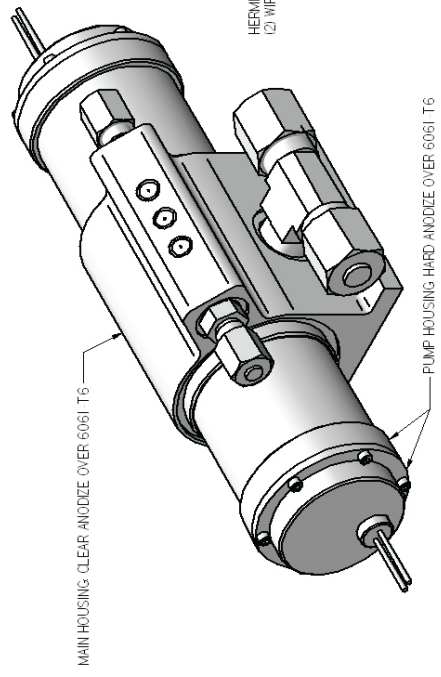
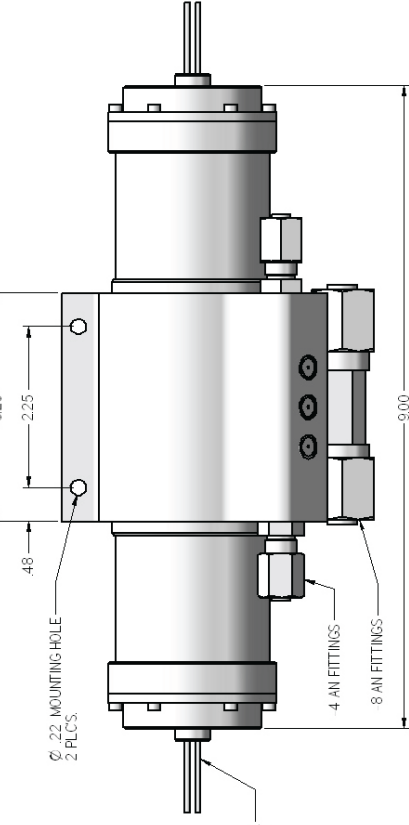
### Pump Description:

The aircraft engine application for which this pump was designed requires an independent pump module (IPM) with redundant pumps mounted on the inboard rib of each aircraft wing. The duplex pump was designed around a continuous duty flow rate requirement of 130 liters/hour with a discharge pressure of 68 psi. The pump design is such that either pump assembly attached to the IPM can be activated by simply switching the power source between the two pump assemblies. The design employs two precision positive displacement, gerotor type pumps, housed end-to-end in a machined, lightweight aluminum alloy manifold containing check and relief valves. The semi-hermetic ("wet" rotor/motor) design has been optimized to eliminate the potential for leaks. A T-fitting is installed in the inlet port for easy connection to the fuel tank on either the starboard or port wing strut (the unused end would simply be capped). Each of the individual pumps are self contained units that are removable from the duplex housing, thereby facilitating LRU serviceability requirements.

### Selected Performance Data:

Fluid	Avgas, 100LL, Gasoline
Flow Rate	130 lph
Discharge Pressure	68 psig nom, 80 max
Inlet Pressure Range	12 - 25 psia
Temperature Range	-65 to +140 °F
Operating Voltage	20 - 17 vdc (13.5 vdc nom)
Current Draw	6 amps max at nominal voltage
Construction	Hermetic assembly
Design life	10,000 hours
Environmental	Per MIL-STD-810





CASE STUDY CS-160 DUPLEX FUEL PUMP