

Tactical Air Launch Decoy

The unmanned air vehicle (UAV) is an air or ground-launched decoy, used to deceive and saturate enemy air defenses during strike aircraft operations. The UAV is powered by a small turbojet engine capable of operating up to 30,000' altitude with speeds up to Mach 0.8.



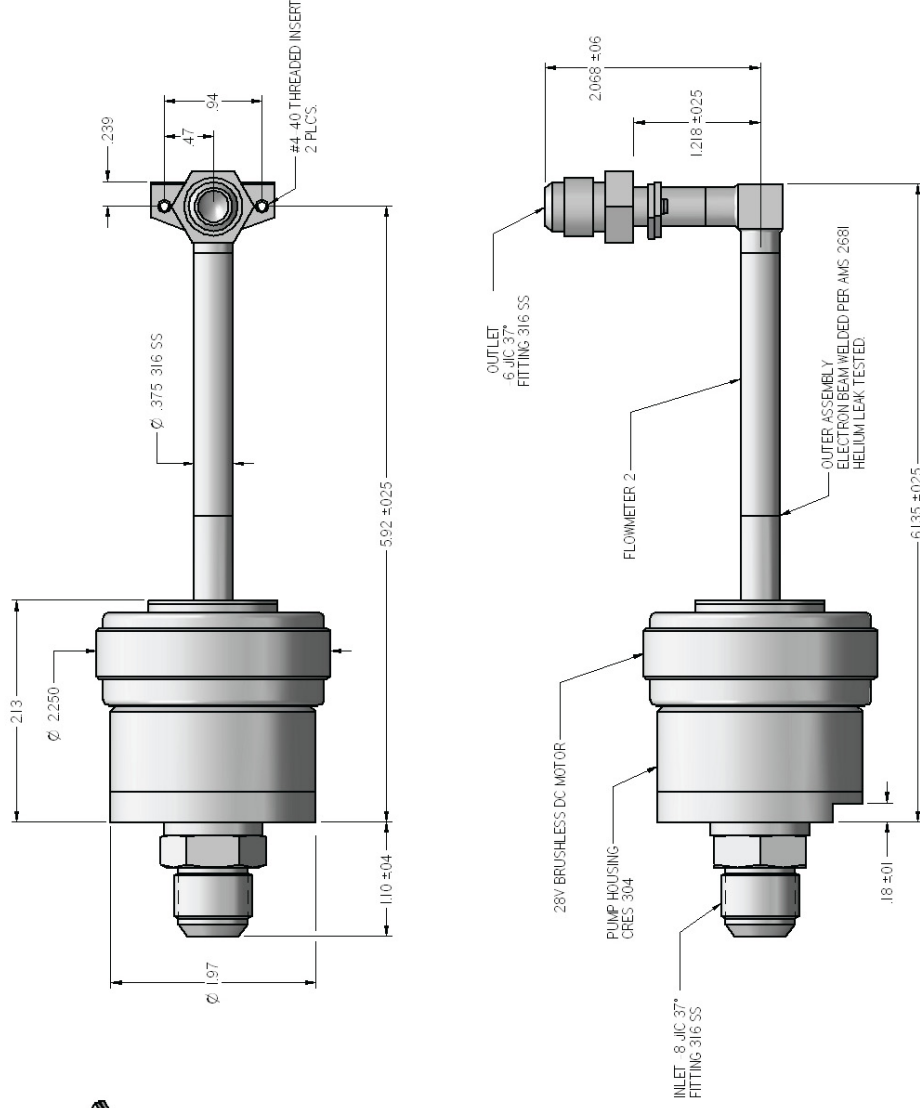
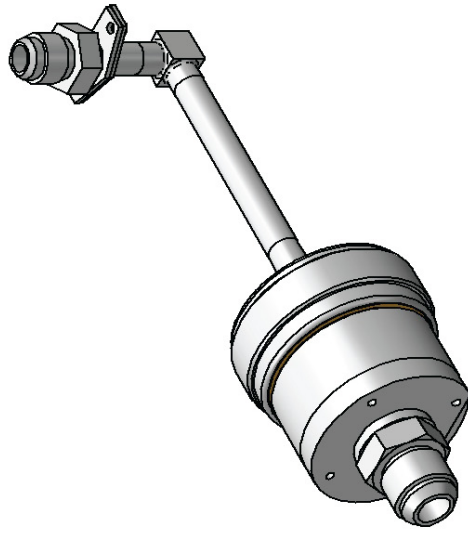
Pump Description:

The pump assembly, when connected to the digital electronic engine control, power supply, and DEC logic provides a variable flow output from 20 to 400 pph to the turbojet engine, thus enabling full authority engine speed control for acceleration and deceleration of the vehicle. The assembly consists of a positive displacement, gerotor type pump, a brushless dc motor that provides a tachometer speed output signal, and a fully hermetic, 316L stainless steel welded plumbing assembly with integral turbine style flowmeter that provides fuel flow signal to the DEC. A high-energy sumarian cobalt brushless dc motor provides the motive force to drive the fully enclosed permanent magnet rotor.

Selected Performance Data:

Fluid	JP-10
Flow Rate	20 pph – 400 pph
Discharge Pressure Range	60 – 150 psig
Inlet Pressure Range	8 – 25 psia
Flow Metering Accuracy	+/- 5 %
Temperature Range	-40 °C to +160 °C
Transient Response	Min to Max in <1.0 sec
Operating Voltage	22 – 32 vdc (28 vdc nom)
Current Draw	5 amps max at nominal voltage
Construction	Hermetic welded assembly
Storage Life	10 years





CASE STUDY CS-088 FUEL METERING PUMP