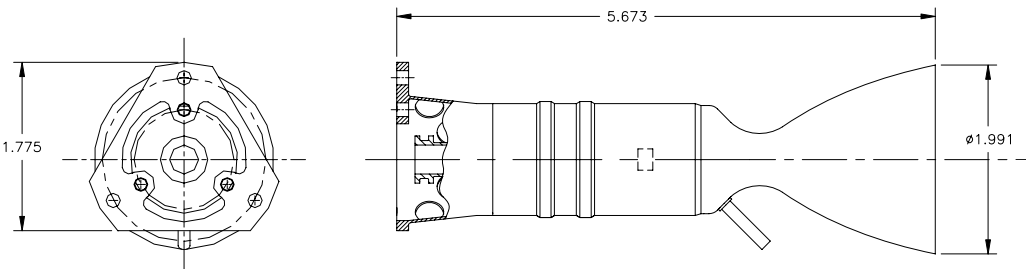


General Kinetics Inc.

150 lbf 90% H₂O₂ Rocket Engine

P/N: GK-PD033-201-001



Specifications

- | | |
|---------------------------------------|----------------------|
| • Thrust, Vacuum | 150 lbfv |
| • Chamber Pressure | 450 psia |
| • Specific Impulse, Vacuum, Delivered | 150 lbf-sec/lbm |
| • Nozzle Expansion Ratio | 15:1 |
| • Oxidizer Feed Pressure, Flow Rate | 1050 psia, 1.0 lbm/s |
| • Max Steady State Burn Duration | > 10 sec |
| • Minimum Impulse Bit | ~ 3 lbf-s |
| • Start Transient | 25 ms |
| • Dry Mass without Valve | 0.75 lbm |
| • Status | In Development |

Description

Thrustor was designed, built and tested for an advanced interceptor vehicle.

NOTES: UNLESS OTHERWISE SPECIFIED

1. INTERPRET DRAWING PER ANSI Y14.5
2. ASSEMBLE PER PD033-201-001
3. APPROX. WEIGHT 0.73 LBM
4. CHEM ETCH PART, LABEL APPROX
5. REF: 2-012 VITON O-RINGS.
6. PREVENT CONTAMINATION PER GK-BS504-001
7. MAX OPER PRESSURE 450 PSIA USING 90-91% H2O2 PER GK-CS609-001

AS SHOWN:
 1.125 INCH 150 Lbf VACUUM THRUSTER
 1UAE9-GK-PD033-201-001 REV [REV LTR]
 MFR: GENERAL KINETICS, LLC
 LAKE FOREST, CA

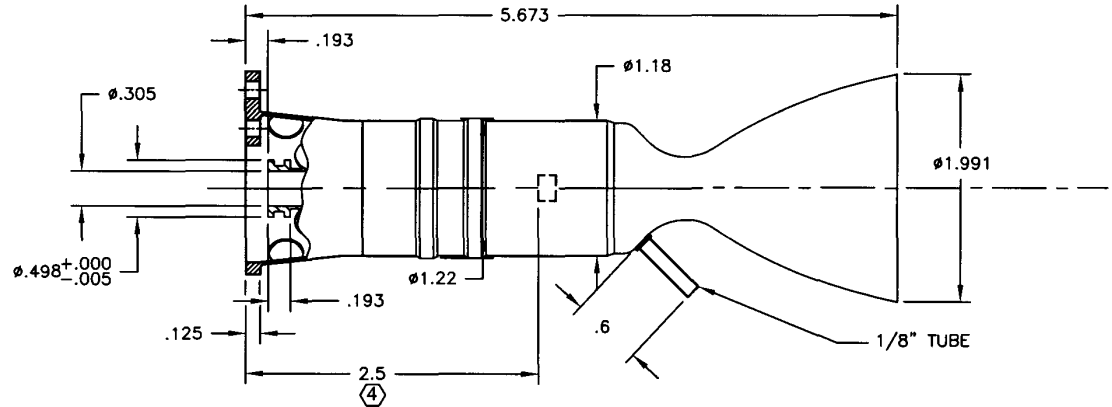
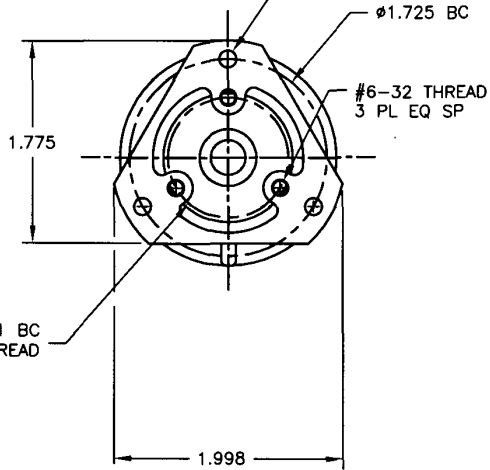
SER NO: [S/N]
 DATE: [MM/YY]

Ø.150
 3 PL
 EQ SP
 (#6 FASTENER)

Ø1.725 BC

#6-32 THREAD
 3 PL EQ SP

Ø1.051 BC
 #6 THREAD



REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	REVISED NOTES: 3: WAS WEIGHT 0.65 LBM; 7: WAS MAX OPER PRESS 500 PSIA; REVISED DIMENSIONS: IS 5.673, WAS 5.366; IS Ø1.991, WAS Ø1.889; IS 2.5, WAS 2.3	12/19/03	EW
B	UPDATED 1/8" TUBE GEOMETRY	01/24/04	

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES DO NOT SCALE DRAWING		GENERAL KINETICS INC. 22661 LAMBERT ST, SUITE 205 LAKE FOREST, CA 92630	
TOLERANCES: MACHINED SURFACE FURNISH		1.125 IN 150 Lbf VAC THRUSTER ICD	
.001 = ± .008 .01 = ± .02 .1 = ± .1 ANGLES = 20°/30°	DRAWN BY: GM/EJW DATE: 09/15/03	SIZE: B DWG NO.: GK-ID033-201-001	REV: B
ENCL: REVIEWER: QA: MANUFACTURING: CHECK:	SCALE: 1:1 RLSE DATE:	SHEET 1 OF 1	