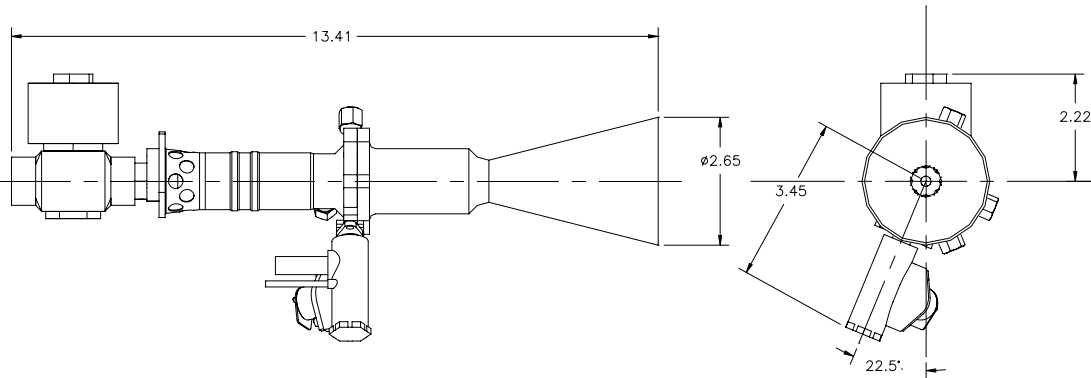


General Kinetics Inc.

300 lbf 90% H₂O₂/RP-1 Rocket Engine

P/N: GK-PD035-201-001



Specifications

• Thrust, Vacuum	300 lbfv
• Chamber Pressure	500 psia
• Specific Impulse, Vacuum, Delivered	280 lbf-sec/lbm
• Nozzle Expansion Ratio	15:1
• Oxidizer Feed Pressure, Flow Rate	1250 psia, 1.0 lbm/s
• Fuel Feed Pressure, Flow Rate	1250 psia, 0.13 lbm/s
• Max Steady State Burn Duration	> 6 sec
• Minimum Impulse Bit	~ 6 lbf-s
• Start Transient	25 ms
• Dry Mass with Valves, without Valves	4.7 lbm, 3.4 lbm
• Status	In Development

Description

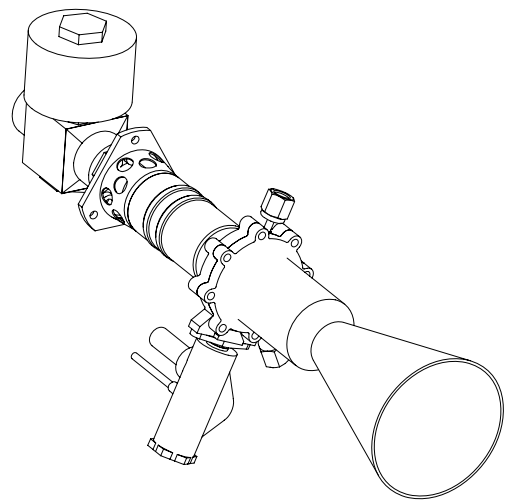
Thrustor was designed, built and tested for an advanced interceptor vehicle.

8 7 6 5 4 3 2 1

NOTES: UNLESS OTHERWISE SPECIFIED

1. ASSEMBLE PER GK-PD035-201-001
2. PREVENT CONTAMINATION PER GK-BS504-001
3. MASS 4.7 LBM MAX WITH VALVES, 3.4 LBM MAX WITHOUT VALVES
4. MAX OPERATING CHAMBER PRESSURE 500 PSIA USING 90% H2O2 PER GK-CS609-001 & RP-1 PER MIL-P-25576
5. REF: OX VENTURI AND INLET ORING 2-012 VITON ORING
6. REF: FUEL VALVE METAL C-RING ADVANCED ECI-000451-03-14-6-SPC
OR GARLOCK HELICOFLEX C-601812 REV N/C
7. REF: CHAMBER METAL C-RING ADVANCED ECI-001689-03-14-6-SPC
OR GARLOCK HELICOFLEX C-601813 REV N/C
8. SHOWN W/GK-PD035-203-001 NOZZLE, RHENIUM

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	UPDATED VIEWS/ILLUSTRATIONS; INCLUDED MASS NUMBERS FOR NOTE 3	06/30/04	EW
B	ADDED NOTE 8	10/11/04	EW



ISOMETRIC VIEW

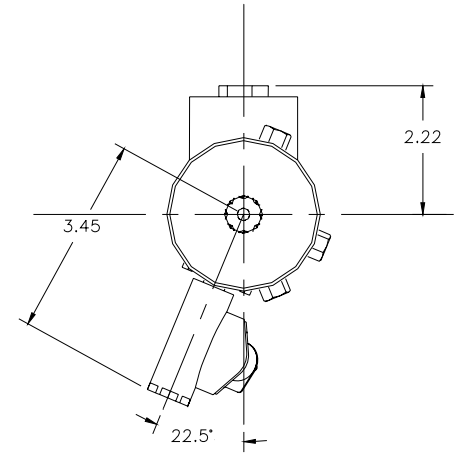
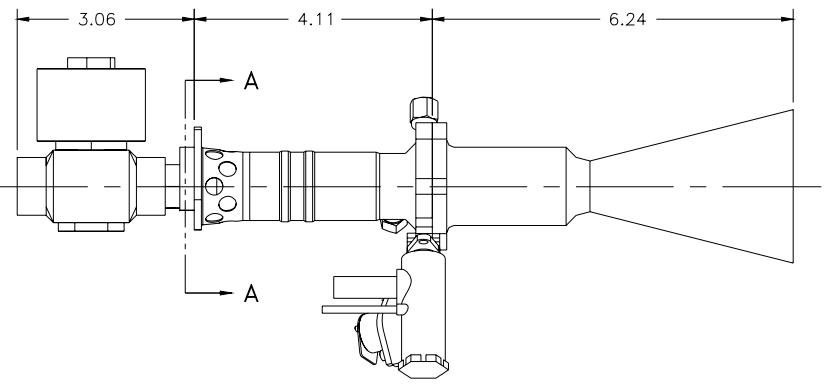
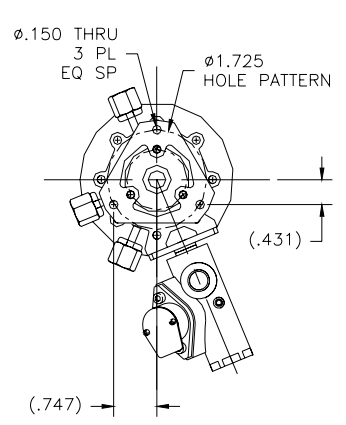
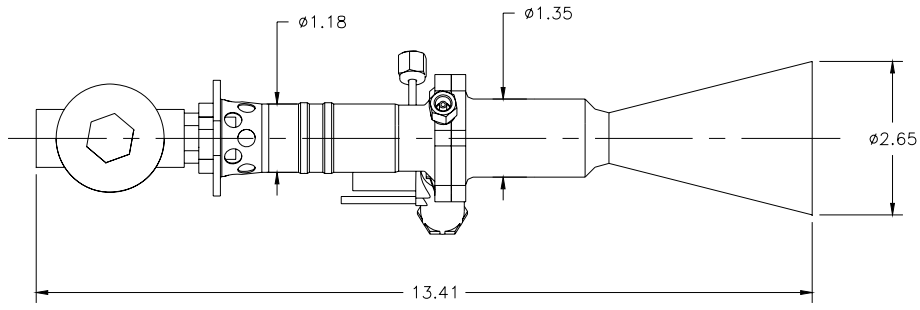
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES DO NOT SCALE DRAWING	
TOLERANCES:	MACHINED SURFACE FINISH
.XXX = ± .005	125/
.XX = ± .02	
.X = ± .1	
ANGLES = ±0°30'	
DRAWN BY	GM & EJW 06/07/04
ENGINEERING	
ENG. REVIEWER	
QA	
MANUFACTURING	
CHECK	

GENERAL KINETICS INC
22661 LAMBERT ST, SUITE 205
LAKE FOREST, CA 92630
300 Lbf VAC
Bi-PROP THRUSTER
ICD

SIZE	DWG NO.	REV.
B	GK-ID035-201-001	B
SCALE	1:2	RLSE DATE
		SHEET 1 OF 2

8 7 6 5 4 3 2 1

8 7 6 5 4 3 2 1



VIEW A-A

H2O2 VALVE, VENTURI & H2O2 VALVE ADAPTER
REMOVED

SIZE	DWG NO.	REV.
B	GK-ID035-201-001	B
SCALE	1:2	RLSE DATE
		SHEET 2 OF 2

8 7 6 5 4 3 2 1