



TANK TYPE	MOUNT	LOCATION
Diaphragm	Pedestal	Apex

This is a 13-inch spherical pressure vessel constructed of 6Al-4V titanium. Positive fuel expulsion is provided by a resersible ethylene propylene terpolymer (AF-E-332) rubber diaphragm retained (welded in) at the sphere mid-plane. Mounting is accomplished on a pedestal mount located on the apex of the propellant hemisphere.

ATK Part Number 80216-1

SIZE: 12.88-inch ID Sphere

ISO 9001 & AS 9100 REGISTERED

APPLICABLE DOCUMENTS

Acceptance Test Procedure	50-000190
Quality Test Procedure	50-000191
Quality Test Report	56-000071
Cleaning	CPP 3457

TANK CHARACTERISTICS

Operating Pressure, psig	396	Total Volume, ci	1,080
Proof Pressure, psig	594	Prop Volume, ci	760
Cryo Proof, psig	NA	Max Design Wt, lbs	6.0
Burst Pressure, psig	792	Minimum Wall, inch	0.019

ACCEPTANCE ENVIRONMENTAL TESTS

Random Vibration

DIAPHRAGM INFORMATION

Diaphragm P/N	80-216007-1
Diaphragm Mold P/N	T-1262
Diaphragm Gross Wt	1.0
Diaphragm Matl Type	AF-E-332
Diaphragm, Material	Note 2 90-000075
Diaphragm Processing	Note 2 90-000087
N-Ray Inspection Procedure	1002

FORGINGS

FORGINGS P/N	SUPPLIER	Die No
80-216061-1		
80-216063-1		
RING FORGING		RING SIZE, (Rough Machined)
80-216003-1, Retainer	13.13 +.09 OD x 11.81 -.09 ID x 1.38 +.09 Lg	

TUBE TYPE AND SIZE

TRANSITION	SIZE
80-216001-1 (2)	.250 OD x .020 Wall

Notes:

- 1: Tooling purchased from RI
- 2: Proprietary Documents
- 3: Very sketchy analysis was performed by RI, i.e. not rigorous
- 4: Global Positioning Satellite (GPS)
- 5: Rockwell International (Seal Beach)

SKETCH NOT TO SCALE

PSI P/N 80216-1

