



TANK TYPE	MOUNT	LOCATION
Diaphragm	Lugs, 3	Girth

This is a 22-inch spherical pressure vessel constructed of 6Al-4V titanium. Positive fuel expulsion is provided by a reversible ethylene-propylene terpolymer (AF-E-332) rubber diaphragm retained (welded in) at the sphere mid-plane. Mounting is accomplished by three (3) lugs parallel with and adjacent to the sphere mid-plane.

ATK Part Number 80409-1

SIZE: 22.14-inch ID Sphere
SIZE: 562-mm

ISO 9001 & AS 9100 REGISTERED

APPLICABLE DOCUMENTS	TANK CHARACTERISTICS	ACCEPTANCE TESTS
Acceptance Test Procedure 50-000534 Cleaning CPP 3867	Operating Pressure, psig 475 Total Volume, ci 5,555 Proof Pressure, psig 795 Prop Volume, ci 4,715 Cryo Proof, psig NA Max Design Wt, lbs 24.00 Burst Pressure, psig 950 Minimum Wall, inch 0.030	Examination of Product Pre-Proof Volume Determination Proof Pressure Test Post-Proof Volume Determination Water Expulsion Test Internal (Diaphragm) Leakag External Leakage Test Final Examination of Product Weight Determination Cleanliness Verification Post Test Inspection
DIAPHRAGM INFORMATION	TANK CHARACTERISTICS (Metrics)	
Diaphragm P/N 80-263027-1 Diaphragm Mold P/N T-1868 Diaphragm Gross Wt 7.6 lbs Diaphragm Matl Type AF-E-332 Material Specification, Rubber MT3-73 Diaphragm Processing Note 2 90-000094 N-Ray Procedure 1002	Operating Pressure, Bar 32.75 Total Volume, l 91.03 Proof Pressure, Bar 54.81 Prop Volume, l 77.27 Cryo Proof, Bar NA Max Design Wt, Kg 10.98 Burst Pressure, Bar 65.50 Minimum Wall, MM 0.76	

Notes:

- 1: Lockheed Martin Spec 55-02461
- 2: Proprietary Document
- 3: Tube Protector SK 792-13
- 4: Fracture Critical

FORGINGS P/N	SUPPLIER	Die No
80-203061-1		
RING FORGING	RING SIZE, (Rough Machined)	
80-298063-1	25.81 +.09 x 22.38 -.09 ID x .71 +.06 LG	

TUBE TYPE AND SIZE

TRANSITION	SIZE
80-409001-1	.375 OD x .028 Wall
80-409001-3	.375 OD x .028 Wall
	9.525 x .711 mm

SKETCH NOT TO SCALE

