



TANK TYPE	MOUNT	LOCATION
Diaphragm	Flange	Girth

This is a 40-inch oblate spheroid pressure vessel constructed of 6Al-4V titanium. Positive fuel expulsion is provided by fully reversible ethylene-propylene terpolymer (AF-E-332) rubber diaphragm retained (welded in) at the mid-plane. Mounting is accomplished on a continuous flange parallel with and adjacent to the mid-plane.

ATK Part Number 80487-1

SIZE: 40-inch Oblate Spheroid
SIZE: 1016-mm

ISO 9001 & AS 9100 REGISTERED

APPLICABLE DOCUMENTS

Acceptance Test Procedure	50-000657
Hubble DM Fracture Analysis Plan	56-000252
Cleaning	CPP 3872

TANK CHARACTERISTICS

Operating Pressure, psig	338	Total Volume, ci	28,144
Proof Pressure, psig	525	Prop Volume, ci	Various
Cryo Proof, psig	N/A	Max Design Wt, lbs	76.0
Burst Pressure, psig	676	Minimum Wall, inch	0.050

ACCEPTANCE TESTS

Remove Thermostats and Temp. Sensors
 Examination of Product
 Pre-Proof Volumetric Capacity Test
 Proof Pressure Test
 Post-Proof Volumetric Capacity Test
 Internal Leak Test
 External Leak Test
 (END OF SCREENING TESTS)

DIAPHRAGM INFORMATION

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	90-000094
N-Ray Procedure	1002

TANK CHARACTERISTICS (Metrics)

Operating Pressure, Bar	23.30	Total Volume, l	461.20
Proof Pressure, Bar	36.20	Prop Volume, l	Various
Cryo Proof, Bar	N/A	Max Design Wt, Kg	34.47
Burst Pressure, Bar	46.61	Minimum Wall, MM	1.270

QUALIFICATION TESTS

Qual by similarity on 80263-1.

Notes:

- 1: Tooling owned by TRW
- 2: Proprietary Document
- 3: This tank was originally qualified under P/N 80263 and the QTP is 50-000209 & QTR is 56-000075
 Tube Protector SK-1499
 Different tubes, same mounting flange as 80263-1

FORGINGS

FORGINGS P/N	SUPPLIER	Die No
80-260061-1		
RING FORGING	RING SIZE, (Rough Machined)	
80-263065	40.46 +.09 ODx39.12 -.09 IDx1.68 +.09 Lg	
80-263063	42.57 +.09 ODx39.56 -.09 IDx3.81 +.25 Lg	

TUBE TYPE AND SIZE

Transition	SIZE
80-407005-1	0.375 OD x 0.042 Wall Gas
80-407001-1	0.750 OD x 0.039 Wa.; Fuel

TUBE TYPE AND SIZE (Metrics)

80-407005-1	9.525 x 1.067 mm
80-407001-1	19.05 x .9906 mm

