

TANK TYPE Diaphragm	MOUNT Flange	LOCATION Girth
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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.

Part Number 80407-1

SIZE: 40.2" ID x 31.8" LONG
SIZE: 1021 mm ID x 808 mm LONG
Oblate Spheroid

ISO 9001 & AS 9100 REGISTERED

APPLICABLE DOCUMENTS		TANK CHARACTERISTICS		ACCEPTANCE TESTS		
Acceptance Test Procedure	50-000542	Operating Pressure, psig	400	Total Volume, ci	28,144	Examination of Product Pre-Proof Volumetric Capacity Test Proof Pressure Test Post-Proof Volumetric Capacity Test Internal Leak Test External Leak Test Weld Quality Inspection Outside Surface Quality Inspection Final Examination of Product Cleanliness Data Review
Qual Test Procedure	50-000209	Proof Pressure, psig	600	Prop Volume, ci	Various	
Qual Test Report	56-000075	Cryo Proof, psig	N/A	Max Design Wt, lbs	78.0	
Cleaning	CPP 3872	Burst Pressure, psig	800	Minimum Wall, inch	0.050	
DIAPHRAGM INFORMATION		TANK CHARACTERISTICS (Metrics)				
Diaphragm P/N	80-263027-1	Operating Pressure, Bar	27.58	Total Volume, l	461.20	
Diaphragm Mold P/N	T-1868	Proof Pressure, Bar	41.37	Prop Volume, l	Various	
Diaphragm Gross Wt	7.6 lbs	Cryo Proof, Bar	N/A	Max Design Wt, Kg	35.38	
Diaphragm Matl Type	AF-E-332	Burst Pressure, Bar	55.16	Minimum Wall, MM	1.270	
Material Specification, Rubber	MT3-73					
Diaphragm Processing	90-000094					
N-Ray Procedure	1002					

Notes:

- 1: Tooling owned by Northrop Grumman
 - 2: Proprietary Document
 - 3: Burst report is 56-000120
 - 4: Fracture Critical
 - 5: This tank was originally qualified under P/N 80263 and the QTP is 50-000209 & QTR is 56-000075
- Tube Protector SK-1487
 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

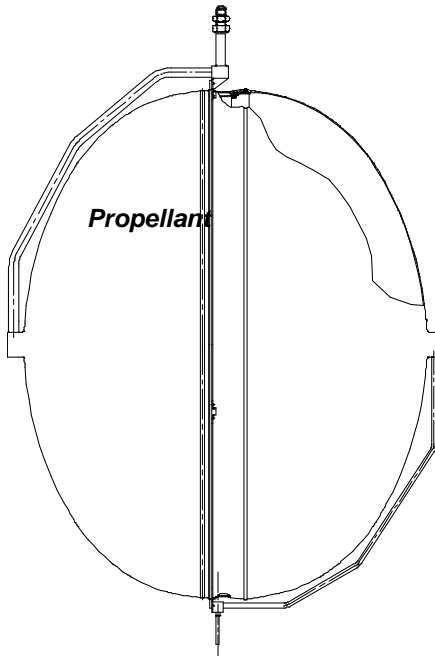
TUBE TYPE AND SIZE

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

QUALIFICATION TESTS
Qual by similarity on 80263-1.



Pressurant

