

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 80382-1

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	
Acceptance Test Procedure	50-000456
Cleaning	CPP 3745
DIAPHRAGM INFORMATION	
Diaphragm P/N	80-263007-1
Diaphragm Mold P/N	T-1868
Diaphragm Gross Wt	7.6 (3.44 Kg)
Diaphragm Matl Type	AF-E-332
Material Specification, Note 2	90-000075
Diaphragm Processing, Note 2	90-000087
N-Ray Procedure	1002

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

ACCEPTANCE TESTS	
Examination of Product	
Pre-Proof Volumetric Capacity Test	
Proof Pressure Test	
Post-Proof Volumetric Capacity Test	
Internal Leak Test	
External Leak Test	
Radiographic Inspection	
Dye Penetrant Inspection	
Final Examination of Product	
Cleanliness	
Data Review	

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	NA	Max Design Wt, Kg	34.47
Burst Pressure, Bar	46.61	Minimum Wall, MM	1.270

Notes:

- 1: Tooling owned by Northrop Grumman
- 2: Proprietary Document
- 3: This diaphragm is fully reversible
- 4: Burst report is 56-000120
- 5: This tank is a redesign of P/N 80263-1
- 6: Fracture Critical

FORGINGS		
FORGINGS P/N	SUPPLIER	Die No
80-260061-1 (2)		
RING FORGING		RING SIZE, (Rough Machined)
80-263065-1, Retainer	40.46 +.09 ODx39.12 -.09 IDx1.68 +.09 Lg	
80-263063-1, Cylinder	42.57 +.09 ODx39.56 -.09 IDx3.81 +.25 Lg	

QUALIFICATION TESTS	
Qual by similarity on 80263-1.	

TUBE TYPE AND SIZE

TRANSITION	SIZE
80-263001-1, (2)	.250 OD x .016 wall

TUBE TYPE AND SIZE (Metrics)

TRANSITION	SIZE
80-263001-1, (2)	6.35 x .406 MM

