

<b>TANK TYPE</b> DIAPHRAGM	<b>MOUNT</b> BOSSSES	<b>LOCATION</b> POLAR
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This is a 9-inch Diameter pressure vessel constructed of 6Al-4V titanium. Positive fuel expulsion is provided by a reversing AF-E-332 rubber diaphragm retained (welded in) at the mid-plane. Mounting is accomplished by polar bosses.

**Part Number 80608-1**

**SIZE: 9.17-inch ID x 16.31 inch long**  
**SIZE: 235 mm x 414.3 mm Long**

**ISO 9001 & AS 9100 REGISTERED**

**APPLICABLE DOCUMENTS**

Acceptance Test Procedure	50-000939
Qualification Test Procedure	50-000937
Cleaning	CPP 4117

**TANK CHARACTERISTICS**

Operating Pressure, psig	400	Total Volume, ci	830.0
Proof Pressure, psig	500	Prop Volume, lbm	20.8
Cryo Proof, psig	NA	Max Design Wt, lbs	5.17
Burst Pressure, psig	600	Minimum Wall, inch	0.025

**ACCEPTANCE TESTS**

Examination of Product, Preliminary Volume
Proof Pressure Volume
Pressure Drop, Flow Test & Expulsion Efficiency
Negative Pressure Capability
External Leak Test
Internal Leak Test
Non-Destructive Evaluation
Final Examination of Product
Cleanliness Verification

**DIAPHRAGM INFORMATION**

Diaphragm P/N	80-608007-1
Diaphragm Mold P/N	T-9914
Diaphragm Gross Wt	.56 lbs
Diaphragm Matl Type	AF-E-332

**TANK CHARACTERISTICS (Metrics)**

Operating Pressure, barg	27.58	Total Volume, l	13.60
Proof Pressure, barg	34.47	Prop Volume, kg	9.435
Cryo Proof, barg	NA	Max Design Wt, Kg	2.345
Burst Pressure, barg	41.37	Minimum Wall, MM	0.635

**Notes:**  
1: Tooling owned by Northrop Grumman  
2: Proprietary Document

**FORGINGS**

<b>FORGINGS P/N</b>	
80-608061-1 (2)	
<b>RING FORGING</b>	<b>RING SIZE. (Rough Machined)</b>
80-608063-1	10.0 OD x 8.0 ID x 5.75 Long
	254 mm x 203.2 mm x 146.05 mm Long

**QUALIFICATION TESTS**

Examination of Product, Preliminary Volume
Proof Pressure Volume
Pressure Cycling
External Helium Leak
Internal Helium Leak
NDE
Vibration Testing
Volumetric Capacity measurement
Proof Pressure
Volumetric Capacity measurement
Differential Pressure Test, Mass Flow Rate & Expulsion Efficiency
Internal Helium Leak
External Helium Leak
NDE
Final Visual Inspection/Examination
Burst Pressure Test

**TUBE TYPE AND SIZE**

<b>TITANIUM</b>	<b>SIZE</b>
80-608025-5	.250 OD x .020 Wall x 1.5 Long
	63.5 mm x .508 mm x 38.1 mm long
80-608005-1	.283 OD x .020 wall x 3.90 Long
	7.188 mm x .508 mm x 99.06 mm Long

