

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

**Part Number 80485-1**

**SIZE: 40.2" ID x 30.8" LONG**  
**SIZE: 1021 mm ID x 808 mm LONG**

**ISO 9001 & AS 9100 REGISTERED**

**APPLICABLE DOCUMENTS**

Acceptance Test Procedure	50-000659
Fracture Control Plan	54-000238
Cleaning	CPP 3988

**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 Note 2	90-000094
N-Ray Procedure	1002

**TANK CHARACTERISTICS**

Operating Pressure, psig	352	Total Volume, in <sup>3</sup>	28,144
Proof Pressure, psig	550	Prop Volume, in <sup>3</sup>	Various
Cryo Proof, psig	N/A	Max Design Wt, lbs	76.00
Burst Pressure, psig	676	Minimum Wall, inch	0.050
Actual Burst, psig			

**TANK CHARACTERISTICS (Metrics)**

Operating Pressure, bar	24.27	Total Volume, l	461
Proof Pressure, bar	37.92	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
Actual Burst, bar			

**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

**Notes:**

1. Tooling owned by Northrop Grumman
2. Proprietary Document
3. This tank was originally qualified under P/N 80263 and the QTP is 50-000209 & QTR is 56-000075
4. Tube Protector SK-1487
5. Different tubes, same mounting flange as 80263-1

**FORGINGS**

<b>Forgings P/N</b>	<b>SUPPLIER</b>	<b>Die</b>
80-260061-1		

<b>Roll Ring Forging</b>	<b>Ring Size (Rough Machined)</b>
80-263065-1	40.46 +.09 x 39.12 -.09 ID x 1.68 +.09 LG
80-263063-1	42.57 +.09 x 39.56 -.09 ID x 3.81 +.25 LG

**TUBE TYPE AND SIZE**

<b>TRANSITION</b>	<b>SIZE</b>
80-263001-1, (2)	.250" OD x .016" wall (6.35 mm x .406 mm)

**QUALIFICATION TESTS**

Qual by similarity on 80263-1.

