TANK TYPE	MOUNT	LOCATION
Diaphragm	Flange	Girth

NORTHROP GRUMMAN

This is a 17-inch spherical pressure vessel constructed of 6Al-4V titanium. Positive fuel expulsion is provided by a 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 80401-1

SIZE: 17.43-inch ID Sphere
SIZE: 443-MM ID

ISO 9001 & AS 9100 REGISTERED

APPLICABLE DOCUMENTS

Acceptance Test Procedure	50-000503
Qualification Test Procedure	See Note 5
Fracture Plan	54-000159
QA Program Plan	56-000084
Cleaning	CPP 3842

DIAPHRAGM INFORMATION

Diaphragm P/N		80-285007-1
Diaphragm Mold P/N		T-2168
Diaphragm Gross Wt		1.44
Diaphragm Matl Type		AF-E-332
Diaphragm, Material	Note 2	90-000075
Diaphragm Processin	Note 2	90-000087
N-Ray Procedure		1002

Notes:

1: Tooling belongs to Northrop Grumman
2: Proprietary Document
3: Fracture Mechanics Proof. System proof is 550 psig
4: Vibration Fixture is T-2179
5: Original design qualified under P/N 80285-1 and QTP No. 50-000230
6: Tube Protectors are SK 1440 & SK 1441
7: Fracture Critical

TANK CHARACTERISTICS

Operating Pressure, psig	319	Total Volume, ci	2,705
Proof Pressure, psig, Note 3	970	Prop Volume, ci	2,049
Cryo Proof, psig	NA	Max Design Wt, lbs	15.43
Burst Pressure, psig	1,057	Minimum Wall, inch	0.034

TANK CHARACTERISTICS (Metrics)

Operating Pressure, Bar	21.99	Total Volume, l	44.33
Proof Pressure, Bar, Note 3	66.88	Prop Volume, l	33.58
Cryo Proof, Bar	NA	Max Design Wt, kg	7.00
Burst Pressure, Bar	72.88	Minimum Wall, MM	0.864

FORGINGS

FORGINGS P/N	SUPPLIER	Die No
80-285061-1 (2)		

RING FORGING	RING SIZE, (Rough Machined)
80-285063-1, Flange	20.31 +.09 ODx18 -.09 IDx.81 +.06 Lg
80-285065-1, Retainer	17.68 +.09 ODx16.44 -.09 IDx1.44 +.12 Lg

TUBE TYPE AND SIZE

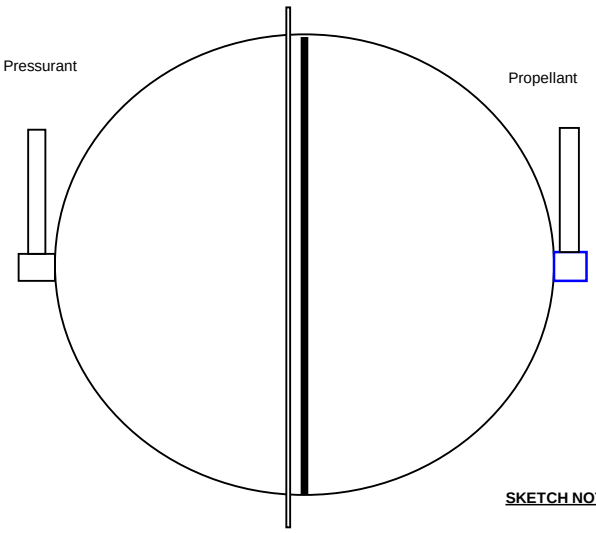
TRANSITION	SIZE
80-401008-1 (2)	

ACCEPTANCE TESTS

- Preliminary Examination of Product
- Pre-Proof Volume Determination
- Proof Pressure Test
- Post-Proof Volume Determination
- Internal Leakage
- External Leakage
- Penetrant Inspection
- Radiographic Inspection
- Weight Test
- Final Examination of Product
- Cleanliness

QUALIFICATION TESTS

Qual by similarity on 80285-1



SKETCH NOT TO SCALE

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13-Jun-18