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TANK TYPE	MOUNT	LOCATION
Diaphragm	Bosses	Polar

This is a 9-inch spherical pressure vessel constructed of 6Al-4V titanium. Positive fuel expulsion is provided by a reversing EPT-10 rubber diaphragm retained (weld in) at the sphere mid-plane. Mounting is accomplished by polar bosses. See note 3 below.

ATK Part Number 80278-1

SIZE: 9.41-inch ID Sphere
SIZE: 239-mm

ISO 9001 & AS 9100 REGISTERED

APPLICABLE DOCUMENTS

Acceptance Test Procedure	50-000223
Qualification Test Procedure	50-000260
Qualification Test Report	56-000092
Cleaning	CPP 9010

TANK CHARACTERISTICS

Operating Pressure, psig	100	Total Volume, ci	415
Proof Pressure, psig	600	Prop Volume, ci	285
Cryo Proof, psig	NA	Max Design Wt, lbs	3.25
Burst Pressure, psig	800	Minimum Wall, inch	0.014

ACCEPTANCE ENVIRONMENTAL TESTS

None

ACCEPTANCE TESTS

Preliminary Examination of Product
Pre-Proof Volume Determina
Proof Volume
Internal Volume
Internal Leakage
External Leakage
Expulsion Efficiency
Pressure Drop
Radiographic Inspection
Flourescent Penetrant Inspection
Weight Determination
Final Examination of Product
Cleanliness Verficiation

DIAPHRAGM INFORMATION

Diaphragm P/N		80-156005-7
Diaphragm Mold P/N		T-1020
Diaphragm Gross Wt	EPT-10	
Diaphragm Matl Type	Note 2	Note 3
Diaphragm, Material	Note 2	90-000092
Diaphragm Processing		90-000093
N-Ray Inspection Procedure		1002

TANK CHARACTERISTICS (Metrics)

Operating Pressure, bar	6.89	Total Volume, l	6.80
Proof Pressure, bar	41.37	Prop Volume, l	4.67
Cryo Proof, bar	NA	Max Design Wt, Kg	1.474
Burst Pressure, bar	55.16	Minimum Wall, MM	0.356

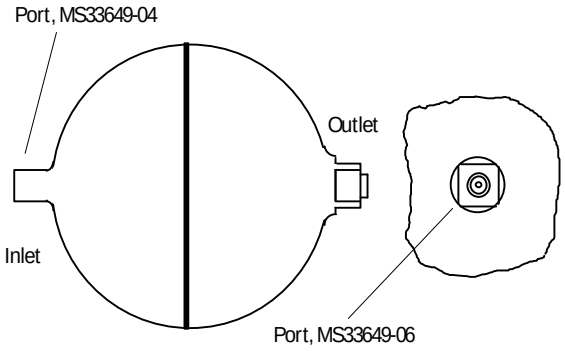
FORGINGS

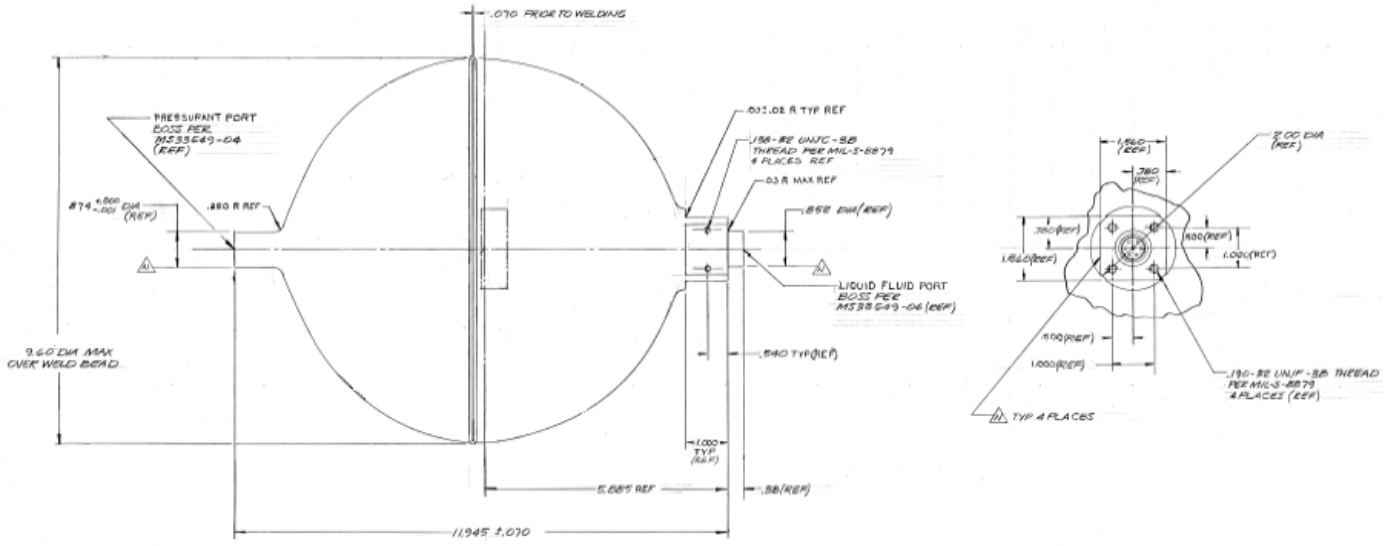
FORGINGS P/N	SUPPLIER	Die No
80082-63 (2)		

RING FORGING	RING SIZE, (Rough Machined)
80-156002-11, Retainer	9.64 +.06 OD x 8.38 -.06 ID x 1.39 +.06 Lg

Notes:

1: Tooling purchased from RI
2: Proprietary Document
3: Qualified with EPT-10 diaphragm
Will quote AF-E-332
4: Rockwell International (Downey)





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