

TANK TYPE Simple Pmd	MOUNT Bosses	LOCATION Girth	PMD DEVICE Vane
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This is a 22-inch spherical pressure vessel constructed of 6AL-4V titanium. A vane type propellant management device (PMD) is provided to expel fuel under low or zero gravity conditions. Mounting is accomplished by three (3) tabs parallel with & adjacent to the mid-plane. An inlet & outlet port is provided.

Part Number 80364-1

SIZE: 22.14-inch ID Sphere

SIZE: 562-mm

ISO 9001 & AS 9100 REGISTERED

APPLICABLE DOCUMENTS	TANK CHARACTERISTICS	ACCEPTANCE TESTS
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Acceptance Test Procedure	50-000395
Protoflight Test Procedure	50-000395
Fracture Analysis Plan	54-000124
Protoflight Test Report	56-000149
Cleaning	CPP 3689

Operating Pressure, psig	400	Total Volume, ci	5,580
Proof Pressure, psig	600	Prop Volume, lbs	150
Cryo Proof, psig	No	Max Design Wt, lbs	12.5
Burst Pressure, psig	800	Minimum Wall, inch	0.029
Actual Burst, psig	1022		

Examination of Product
Volumetric Capacity Test
Proof Pressure Test
Volumetric Capacity Test Post Proof
External Leakage Test
Vibration Tests
External Leakage Test
Outside Surface Quality Inspection
Weld Quality Inspection
Weld Quality Inspection
Weight Test
Examination of Product
Pressurant Tube Weld Quality Inspection
Cleanliness Test
Final Tank Assembly Inspection

Notes:

- 1: Tooling owned by Northrop Grumman
- 2: This tank similar to 80313 & 80360
- 3: The PMD design is proprietary to GE/ASD
- 4: Fracture Critical

TANK CHARACTERISTICS (Metrics)

Operating Pressure, bar	27.58	Total Volume, l	91.44
Proof Pressure, bar	41.37	Prop Volume, Kg	68.04
Cryo Proof, bar	No	Max Design Wt, Kg	5.67
Burst Pressure, bar	55.16	Minimum Wall, MM	0.737
Actual Burst, bar	70.46		

FORGINGS

FORGINGS P/N	SUPPLIER	Die No
80-313061-1 (2)		

TUBE TYPE AND SIZE

TITANIUM	SIZE
80-304009-1, Inlet, 2	.250 OD x .016 wall
80-304009-3, Outlet	.250 OD x .016 Wall
	6.35 x .406 mm

QUALIFICATION TESTS

Qual by similarity on 80360-1.

