



TANK TYPE Diaphragm	MOUNT Lugs (2)	LOCATION Girth
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This is a 19-inch propellant tank is a spherical pressure vessel constructed of 6AL-4V Titanium. Positive propellant expulsion is provided by a reversing AF-E-332 rubber diaphragm retained at the sphere mid-plane. Mounting is accomplished by lugs parallel with and adjacent to the mid-plane. Connection is made to the propellant and pressurant compartments through tube stubs.

ATK Part Number 80486-1
SIZE: 19.06 -inch ID Sphere
SIZE: 484 -mm ID Sphere

ISO 9001 & AS 9100 REGISTERED

APPLICABLE DOCUMENTS		TANK CHARACTERISTICS		ACCEPTANCE TESTS
Acceptance Test Procedure	50-000671	Operating Pressure, psig	377	Preliminary Examination of Product Pre-Proof Volume Determination Proof Pressure Test Post-Proof Volume Determination Pressure Differential & Expulsion Efficiency Penetrant Inspection* Radiographic Inspection* Internal Leakage Test External Leakage Test Determination of Weight & Final Inspection Cleanliness Verification Final Visual Examination
Cleaning	CPP 3995	Proof Pressure, psig	498	
DIAPHRAGM INFORMATION		Cryo Proof, psig	No	
Diaphragm P/N	80-274007-1	Design Burst Pressure, psig	754	
Diaphragm Mold P/N	T-1981	Actual Burst Pressure, psig		
Diaphragm Gross Wt	1.71	TANK CHARACTERISTICS (Metrics)		
Diaphragm Matl Type	AF-E-332	Operating Pressure, Bar	25.99	QUALIFICATION TESTS Qual was performed on 80274-1.
Diaphragm, Material	90-000075	Proof Pressure, Bar	34.34	
Diaphragm Processing	90-000079	Cryo Proof, Bar	No	
N-Ray Inspection Procedure	1002	Burst Pressure, Bar	51.99	
		Actual Burst, Bar		
		FORGINGS		VACUUM RATED
		FORGINGS P/N	SUPPLIER	Die
		80-182061-1 (2)		
		Ring Size, (Rough Machined)		YES
		Ring Forging	SIZE	
		80-274065-1, Retainer	19.03 + .12 OD x 17.55 -.12 ID x 1.5 + .12 Lg	
		80-274063-1, Lug	21.25 + .06 OD x 19.31 -.06 ID x .85 + .06 Lg	
		TUBE TYPE AND SIZE		
		TITANIUM	SIZE	
		80-486015-3	.250 OD x .020 Wall	
		TUBE TYPE AND SIZE (Metrics)		
		TITANIUM	SIZE	
		80-486015-3	6.35 x .5 MM Wall	

Notes:
1: Tube protector is SK 1476-1



6033 East Bandini Boulevard
Commer, California 90040

Telephone (323) 722-0222
Facsimile (323) 721-6002

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