



TANK TYPE Diaphragm	MOUNT Lugs (2)	LOCATION Girth
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This is a 19-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 sphere mid-plane. Mounting is accomplished by two (2) lugs parallel with and adjacent to the sphere mid-plane.

ATK Part Number 80460-1

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	50-000615	Operating Pressure, psig	319	Total Volume, ci	3,660
Design Verification Report	56-000213	Proof Pressure, psig	498	Prop Volume, ci	2,748
Cleaning	NO CPP	Cryo Proof, psig	No	Max Design Wt, lbs	13.3
DIAPHRAGM INFORMATION		Design Burst Pressure, psig	375	Minimum Wall, inch	0.023
Diaphragm P/N	80-274007-1	Actual Burst Pressure, psig			
Diaphragm Mold P/N	T-1981	TANK CHARACTERISTICS (Metrics)			
Diaphragm Gross Wt	1.71	Operating Pressure, Bar	21.99	Total Volume, l	59.98
Diaphragm Matl Type	AF-E-332	Proof Pressure, Bar	34.34	Prop Volume, l	45.03
Diaphragm, Material	90-000075	Cryo Proof, Bar	No	Max Design Wt, Kg	6.01
Diaphragm Processing	90-000079	Burst Pressure, Bar	25.85	Minimum Wall, MM	0.584
N-Ray Inspection Procedure	1002	Actual Burst, Bar			
Notes:		FORGINGS			
1: Tube protector is SK 1476		FORGINGS P/N	SUPPLIER	Die	
		80-182061-1 (2)			
		Ring Size, (Rough Machined)			
		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	
		80-461001-3 (2)		.250 OD x .020 Wall	
		TUBE TYPE AND SIZE (Metrics)			
		TITANIUM		SIZE	
		80-461001-3 (2)		6.35 x .5 MM Wall	
		QUALIFICATION TESTS			
		Qual was performed on 80274-1.			
		VACUUM RATED			
		YES			

