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TANK TYPE	MOUNT	LOCATION
Diaphragm	Pedestal	Apex

This is a 13-inch pressure vessel constructed of 6Al-4V titanium. The tank shell consists of a elliptical pressurant head and a hemispherical head. 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 on a pedestal mount located on the apex of the propellant hemisphere.

ATK Part Number 80498-1

SIZE: 12.88 inch ID
SIZE: 327- mm

ISO 9001 & AS 9100 REGISTERED

APPLICABLE DOCUMENTS

Acceptance Test Procedure	see 80342-1
Qualification Test Procedure	see 80342-1
Burst Test Report	see 80342-1
Qualification Test Report	see 80342-1
Fracture Analysis Plan	see 80342-1
Cleaning	see 80342-1

DIAPHRAGM INFORMATION

Diaphragm P/N	80-216007-1
Diaphragm Mold Tool No	T-1262
Diaphragm Gross Wt	1.0
Diaphragm Material Type	AF-E-332
Diaphragm, Material Note 2	90-000075
Diaphragm Processing Note 2	90-000087
N-Ray Inspection	1002

Notes:

1: Tooling is owned by ATK
2: Proprietary Document
3: This tank is similar to 80342
4: Tube protectors are SK 1127 & SK 1128

TANK CHARACTERISTICS

Operating Pressure, psig	480	Total Volume, ci	920
Proof Pressure, psig	720	Prop Volume, ci	882
Cryo Proof, psig	NA	Max Design Wt, lbs	6.0
Burst Pressure, psig	945	Minimum Wall, inch	0.021
Actual Burst, psig	1,450		

TANK CHARACTERISTICS (Metrics)

Operating Pressure, Bar	33.09	Total Volume, l	15.08
Proof Pressure, Bar	49.64	Prop Volume, l	14.45
Cryo Proof, Bar	NA	Max Design Wt, Kg	2.72
Burst Pressure, Bar	65.15	Minimum Wall, MM	0.533
Actual Burst, Bar	99.97		

FORGINGS

FORGINGS P/N	SUPPLIER	Die
80-342061-1, Press	ARCTURUS	3535
80-216061-1, Prop	ARCTURUS	2971

RING FORGING	RING SIZE, (Rough Machined)
80-216003-11, Retainer	13.13 +.09 OD x 11.81 -.09 ID x 1.38 +.09 Lg

TUBE TYPE AND SIZE

TRANSITION	SIZE
80-342001-1, Inlet	.375 OD x .025 Wall
80-342002-1, Outlet	.500 OD x .025 Wall

TUBE TYPE AND SIZE (Metrics)

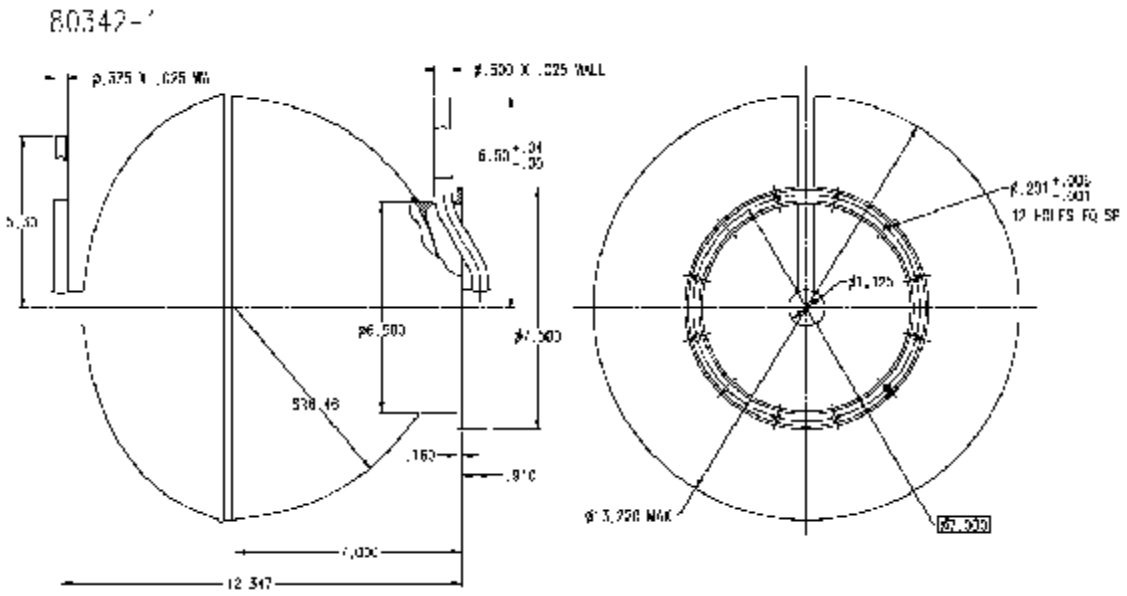
TRANSITION	SIZE
80-342001-1, Inlet	9.25 OD x .635 Wall
80-342002-1, Outlet	12.7 OD x .635 Wall

ACCEPTANCE TESTS

By similarity ATK PN 80342-1

QUALIFICATION TESTS

By similarity ATK PN 80342-1



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