



FUEL TYPE Xenon	MOUNT Polar	LOCATION Boss	PMD DEVICE no
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The Xenon Propellant Tank is a composite overwrapped pressure vessel (COPV) with a liner constructed of a center cylinder welded to end domes and overwrapped with T1000 carbon fiber. The CP-70 titanium heads, and CP-3 cylinder have a nominal .032" membrane thickness. Mounting is provided by polar bosses located on the tank centerline axis.

ATK Part Number 80458-201

SIZE: 16.7" Dia x 21" Long
SIZE: 411.48 mm x 533 mm

ISO 9001 & AS 9100 REGISTERED

APPLICABLE DOCUMENTS	TANK CHARACTERISTICS	ACCEPTANCE TESTS
Acceptance Test Procedure 50-000625	Operating Pressure, psig 2,700 Total Volume, ci 3,300	Examination of Product, Preliminary
Qualification Test Procedure 50-000626	Proof Pressure, psig 3,375 Prop Volume, ci 3,300	Autofrettage @ Ambient
QBS Report See note 1	Cryo Proof, psig No Max Design Wt, lbs 45.0	Volumetric Measurement @ Ambient
Fracture Analysis Plan 54-000230	Design Burst Pressure, psig 4,050 Minimum Wall, inch 0.032	Proof Pressure Test @ Ambient
Stress Analysis Report 54-000231	Actual Burst Press, psig see 80458-1	Volumetric Measurement @ Ambient
Qualification Test Report 56-000206		Volumetric Capacity @ MEOP
Range Safety Compliance Report 56-000207		Boroscope Inspection
Cleaning CPP 3970		Internal Vacuum Test
	TANK CHARACTERISTICS (Metrics)	External Leak Test
	Operating Pressure, Bar 186.16 Total Volume, l 54.08	Weld Quality Inspection
	Proof Pressure, Bar 232.69 Prop Volume, l 54.08	Examination of Product, Final
	Cryo Proof, Bar No Max Design Wt, Kg 20.41	Final Clean
	Burst Pressure, Bar 279.23 Minimum Wall, MM 0.813	
	Actual Burst Press, Bar see 80458-1	

Notes:

(1) QBS is incld in Stress Anal Report 54-000231

FORGINGS

FORGINGS P/N
80-436061-1

TUBE TYPE AND SIZE

304 SS	SIZE
80-458001-1	.375 OD x .050 Wall

TUBE TYPE AND SIZE (Metrics)

304 SS	SIZE
80-458001-1	9.525 x 1.27 MM Wall

QUALIFICATION TESTS

Examination of Product, Preliminary
Autofrettage
Volumetric Measurement
Proof Pressure Test
Volumetric Measurement
Strain Data Correlation
Volumetric Capacity @ MEOP
External Leakage Test
Weight Measurement and Inspection
Propellant Flow Rate Test
MEOP Pressure Cycle Life Test
Proof Pressure Cycle Life Test
External Leakage Test
Dynamic Testing Approval
Sinusoidal Vibration Test
Sine Burst Test
Random Vibration Test
External Leakage Test
Thermal Cycling Test
Random Vibration Test
External Leakage Test
Weld Quality Inspection
Examination of Product, Final
Burst Test

