

## RESERVOIRS



### Description

PDT's bootstrap reservoirs provide fluid storage volume, expansion capability, fluid level sensing/ leak detection and inlet pressurization for Liquid Cooling Systems on Commercial Aircraft. Various displacements are available with

single or dual channel Linear Variable Differential Transducers (LVDT). Bootstrap reservoirs offer an advantage to aircraft cooling systems in that when the systems are not energized there is no quiescent pressure on the fluid circuit,

minimizing the potential for leakage and resulting maintenance activities. Operating pressure is provided by the LCS pump.

### Specification

#### Reservoir Parameters

Fluid:	Propylene glycol/ water (60/ 40% mixture)
Fluid Capacity:	0.85 to 2.28 gal, depending upon model
Temperature:	Operating: -40°F to 185°F
Low Pressure Chamber:	Operating: 30 psig Proof: 138 psig Burst: 165 psig
High Pressure Chamber:	Operating: 230 psig Proof: 356 psig Burst: 575 psig
Position Transducer:	Excitation: 7.00 ± 0.30 vrms, 3000 ± 50 Hz Output: -0.50 v/v min position, +0.50 v/v max position
Dry Weight:	12 to 19.4 lbs max (dry), depending upon model

# RESERVOIRS

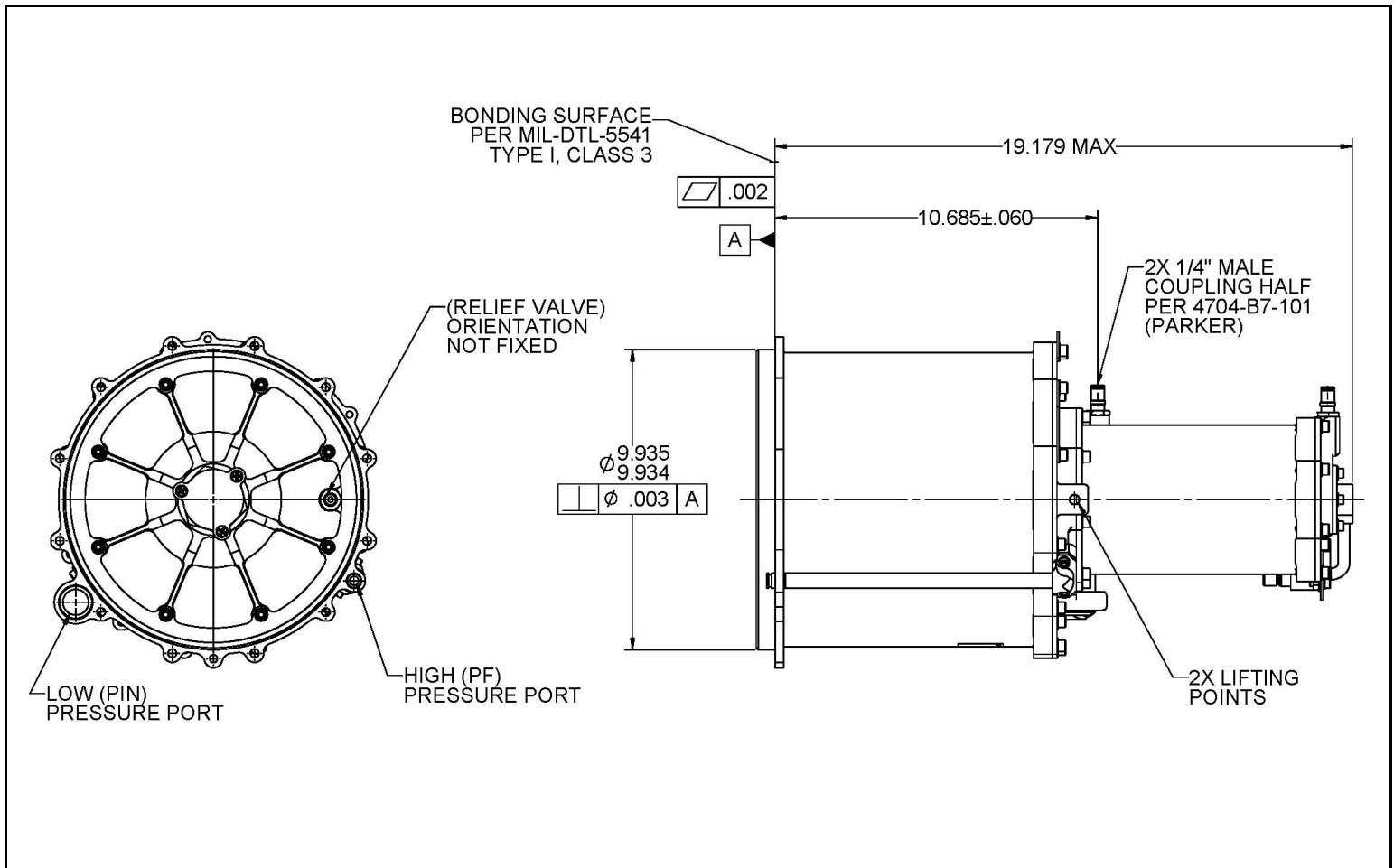
## Performance Parameters by Model Number

Reservoir Model No.	Displaceable Fluid Volume	Flow Rate	Dynamic Performance		Area Ratio, LP/ HP
			Stroke Time	*Activation Pressure	
5778	2.28 gal	2 gpm	68 sec	4.5 psid	4.9 : 1
5779	0.85 gal	2 gpm	25 sec	4.5 psid	9.0 : 1
5894	1.91 gal	6 gpm	19 sec	4.5 psid	7.8 : 1

\*Activation Pressure = HP Fluid Pressure – LP Fluid Pressure

## Envelope

PDT Model 5778 shown, other Models similar



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