

Lube & Scavenge Pump for Pratt & Whitney FT4 Turbine

The FT4 is the first engine of Pratt & Whitney's industrial and marine gas turbine line. Derived from the very successful JT4 axial flow turbojet aircraft engine, the FT4 was first introduced as a propulsion unit on a variety of all-turbine naval vessels, including the Canadian Iroquois class destroyers, and the USCG Hamilton class cutters. The same basic power plant has seen much wider use as a peak demand power turbine. From its first introduction in 1960, nearly 1,000 FT4's have been installed worldwide, and many are still in operation today.



Pump Description:

Cascon Inc is the exclusive supplier of lube oil and scavenge pumps for all new Pratt & Whitney Power Systems FT8 power turbine applications. Our FT4 lube & scavenge pump is derived from this proven technology. The multi circuit gerotor pump is designed in accordance with Turbo Power and Marine Systems (predecessor to P&WPS) original equipment specification IPA 6262. Our FT4 lube & scavenge pump therefore can be used as a direct replacement to the Nichols Model GM626 lube oil pumps originally installed on the power turbine lube skid.

While the interconnect details are nearly identical to the Nichols pump, a minor amount of adaptation is required during installation. The foot-print and base mounting hole pattern is slightly smaller, and we utilize SAE o-ring type fluid ports versus pipe thread.

Please contact Cascon directly for further details including availability, pricing and delivery information.

Selected Performance Data:

Fluid	MIL-L-23699, MIL-L-7808
Flow Rate - Lube Circuit	115 lb/min
Flow Rate - Scav #1 (#7 Brg)	215 lb/min @ 35 psid, 8:1 Air/Oil
Flow Rate - Scav #2 (8/9 Brg)	435 lb/min @ 35 psid, 8:1 Air/Oil
Temperature Range	-45 degF to +275 degF
Lube Operating Pressure	100 psid
Rated Operating Speed	3000 rpm (50 hz), 3600 (60 hz)
Relief Valve	Integral - 120 psi crack
MTBF	40,000 hours
Duty Cycle	Continuous



