

# HSPA181 Hydraluic Fluid Purifier Designed for Aircraft Maintenance

The Pall HSPA181 Purifier offers operators and MRO shops a safe and environmentally friendly solution to maintain air craft hydraulic fluid cleanliness.

Aircraft hydraulic fluids (Skydrol<sup>1</sup> and HyJet<sup>2</sup>) are susceptible to contamination by water, solid particles, chlorinated solvents and air and contaminated hydraulic fluid means damage and corrosion in vital system components. Insufficient purity can even lead to expensive grounding of the aircraft. Storage and subsequent disposal of the contaminated fluid brings environmental penalties and increased cost.

A breakthrough in preventive maintenance, the Pall Mobile Hydraulic Fluid Purifier (HSPA series), operates where it is needed, when it is needed leaving hydraulic fluid free of contaminants within a few hours.



Linked to the aircraft hydraulic systems like a ground power unit, the Pall Mobile Hydraulic Fluid Purifier (HSPA) is a breakthrough in preventive maintenance saving the operator money and time by ensuring operation of aircraft without down time caused by fluid contamination.

## **FEATURES** and **BENEFITS**

- Automated operation with built in diagnostics for easier maintenance and troubleshooting
- Reduces unnecessary maintenance activities and aircraft down time associated with fluid contamination
- Uses the principle of vacuum dehydration to remove 100% of free water and 95% of dissolved water
- Removes 100% of free and entrained gases and up to 90 % of dissolved gases
- Removes particulate by using a high performance (B5(c)≥1000) aircraft-grade filter element to polish the fluid before discharge back to the system reservoir
- Minimize disposal problems and reduce procument costs the impact on the environment
- Promotes sustainability and reduces the environmental impact

## **TECHNICAL INFORMATION**

DRY WEIGHT	750 KG (1653 LB)
OVERALL DIMENSIONS	LENGTH (mm): 3000 maximum (with towbar extended), 1400 maximum (with towbar retracted) WIDTH (mm): 1200 maximum HEIGHT (mm): 1750 maximum
INLET CONNECTIONS	Snap-tite4 Series 72 QRC G1
OUTLET CONNECTIONS	Snap-tite Series 72 QRC G3/4
CIRCULATION FLOW RATE	0 - 32 L/min (0 - 8.45 US gpm)
TOTAL MOTOR POWER	17.22 kW max (single phase) 17.16 kW max (3 phase)
FLUID COMPATIBILITY	Compatible with petroleum based fluids, synthetic hydraulic fluids (including BMS3 - 11) rated for use with fluorocarbon or ethylene
MAXIMUM VISCOSITY (at purifier)	100 cSt
FLUID TEMPERATURE RANGE	10 °C to 60 °C (50 °F to 140 °F)
AMBIENT SERVICE TEMPERATURE	40 °C (104 °F) max
MAX PRESSURE FOR INLET	4.5 bar g (65.3 psig)
MIN PRESSURE FOR INLET	0.5 bar g (7.3 psig)
MAX PRESSURE FOR OUTLET	207 bar g (3000 psig)
NORMAL OPERATING VACCUM	-0.8 bar g
WATER REMOVAL	Pall HSPA purifiers remove free water, free gases, dissolved water (up to 95 %) and dissolved air (up to 90 %).

#### Aircraft Approvals:

Airbus 415.170/94 Airbus SIL 29-051

Boeing 737-SL-29-50 Boeing 747-SL-29-30 Boeing SL-767-29-25

# **ORDERING INFORMATION**

Pall P/N: HSPA181

This unit contains a water sensor and a particle counter can be intregrated. For further details, please contact the Pall sa les office.

The Pall HSPA purifier meets all current harmonised European directives including the machinery, low voltage and EMC di rectives (CE marked).

The equipment has been assessed in accordance with the guidelines laid down in The European Pressure Directive 97/23/EC and has been classified within Sound Engineering Practice S.E.P.

Suitable for use with Group 2 fluids only. Consult Pall Sales for other fluid/gas group suitability.

For further details, facts and figures, please get in touch: aerospace@pall.com



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HSPA181 Mobile Hydraulic Fluid Purifier for Predictive Aircraft Maintenance



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