

PALLsorb[®]

Filter Element

For the removal of water contamination from hydraulic oils, fuels, and lubricants

Introduction

Water is the most common chemical contaminant in fluid systems. It attacks the system by causing:

- Fluid breakdown, including additive precipitation and oil oxidation
- Reduced lubricating film thickness
- Accelerated metal surface fatigue
- Corrosion
- Jamming of components as a result of ice crystals formed at low operating temperatures

The damage caused by corrosion is well known. On the other hand, fluid breakdown and accelerated metal surface fatigue are not usually recognized as a result of water contamination. Although these problems can readily be prevented, they are all too often neglected.

Description

PALLsorb filter elements remove and retain free and emulsified water contamination. Their construction provides high water retention while maintaining structural integrity. PALLsorb elements are rated to 100 psid (7 bar) collapse pressure.

Applications which will benefit from the addition of PALLsorb elements include:

- Hydraulic Systems
- Cutting Fluids
- Lube Systems
- Diesel Fuel
- Phosphate Esters
- Synthetic Oils
- Any fluid system which can benefit from the use of PALLsorb elements to reduce corrosion and wear caused by water.

Selection

Recommended locations for PALLsorb elements are in system return lines, in "kidney" loops on the reservoir, or on flushing units. A Pall Ultipor III™ filter should also be employed upstream of the PALLsorb element to provide system protection from particulate contamination and extend service life of the PALLsorb filter. PALLsorb elements are available in three series of standard Pall housings; the 7500 series spin-on filters, the 8600 series Rotolok® filters, and the 8300 series high flow filters.



PALLsorb Filter Elements

Sizing

From Table 1 below, multiply actual flow rate by the ΔP factor to determine pressure drop with fluid at 150 SUS, 0.9 S.G. For other viscosity or specific gravity, adjust by multiplying cartridge $\Delta P \times$ new S.G./0.9 and new viscosity in SUS/150.

Note: For optimum water holding capacity, clean pressure drop at flow rate should be ≤ 2 psid.

Table 1

CARTRIDGE	ΔP FACTOR (PSID/GPM)	WATER HOLDING CAPACITY (ML)
HC7500SWT4	0.55	90
HC7500SWT8	0.3	170
HC9600FWT8	0.67	75
HC9600FWT13	0.42	120
HC8300FWT8	0.27	190
HC8300FWT16	0.13	400
HC8300FWT39	0.06	900

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Ordering Information

Assembly Part No:

HH7500

H 8300
H 8600

TABLE 1

WT

TABLE 2 TABLE 3 TABLE 4 TABLE 5 TABLE 6

Replacement Element No:

HC { 7500S
8300F
9600*F }

WT

TABLE 7 TABLE 1

* for use in 8600 Series assemblies

TABLE 1

SEAL OPTIONS		
CODE	SEAL MATERIAL	FLUID SERVICE
H	BUNA N (Nitrile)	Petroleum Based Oils
Z	Fluorocarbon	Specified Synthetics

TABLE 2

PORT STYLE OPTIONS		
CODE	PORT STYLE	AVAILABLE FOR
A	SAE straight thread O-ring boss per SAE J514H	7500, 8300, 8600
B	NPT	7500, 8600
D	SAE split flange per J518C	8300 only

TABLE 3

PORT SIZE OPTIONS		
CODE	PORT SIZE	AVAILABLE FOR
12	3/4" nominal	8600 only
16	1" nominal	7500, 8600
20	1 1/4" nominal	7500 only
24	1 1/2" nominal	7500 only
32	2" nominal	8300 only
40	2 1/2" nominal	8300 only

TABLE 4

HOUSING LENGTH OPTIONS		
CODE	CARTRIDGE LENGTH	AVAILABLE FOR
R	4"	7500 only
S	8"	7500, 8300, 8600
T	13"	8600 only
U	16"	8300 only
X	39"	8300 only

TABLE 5

BYPASS VALVE OPTIONS		
CODE	VALVE OPTIONS	AVAILABLE FOR
A	25 ± 4 psid bypass only	7500, 8300, 8600
B	50 ± 5 psid bypass only	7500, 8300, 8600
8**	25 ± 4 psid bypass with anti-backflow valve	7500, 8600
9**	50 ± 5 psid bypass with anti-backflow valve	7500, 8600

**Not available with 20 or 24 ports for 7500 Series Assemblies.

TABLE 6

ΔP DEVICE OPTIONS		
CODE		ΔP INDICATOR
8300	7500 8600	
BT	BM	Plug in place of ΔP device.
PT	PM	VISUAL INDICATOR - with thermal lockout: no signal below 32°F. Signal above 80°F. Red button rises 3/16" on actuation. Remains up until manually reset. Includes clear plastic cover.
NA	PL	Deltamynd™ visual indicator with thermal lockout. No signal below 85°F. Signal above 110°F.
LT	LM	ELECTRICAL SWITCH SPDT - Connection: 1/2" male conduit threads. Three color-coded 6" flying leads polled.
ST	SM	ELECTRICAL SWITCH SPDT - Connection: three pin receptacle per MS 3102 R10SL-3P.
Pressure Settings: 16 ± 3 for 25 psid bypass 35 ± 5 for 50 psid bypass and non-bypass option.		

TABLE 7

ELEMENT LENGTH OPTIONS		
LENGTH CODE	REFERENCE HOUSING LENGTH	AVAILABLE FOR
4	R	7500 only
8	S	7500, 8300, 8600
13	T	8600 only
16	U	8300 only
39	X	8300 only



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