



CLEAN OIL  
BRIGHT IDEAS

## CJC™ Product Sheet

# HTO HP 27/108

CJC™ Off-line Fine Filter for Heat Transfer Oil

### APPLICATION

The CJC™ Heat Transfer Oil HTO HP 27/108 is used for the maintenance of heat transfer oil in central heating systems and where high processing temperatures are necessary.

The HTO HP 27/108 is ideal for removal of particles and oil degradation products and for raising the flash point.

### FUNCTION

The CJC™ HTO HP filter is connected to the main system as an off-line system, meaning the pump draws part of the hot oil from the main flow. The 300°C hot oil is cooled in two steps, first in a heat exchanger and afterwards in an air blast cooler to reduce the temperature to 150°C, which is max. temperature for the filter inserts. The oil is then pumped via the filter and back to the main system, through the heat exchanger, where the oil is reheat to 210°C. It is re-commended that the filtered fluid is returned to the main system close to the suction line of the main system pump.

The pressure drop over the filter - and consequently the contaminant absorption of the filter inserts - is monitored on the pressure gauge placed on the piping between pump and filter housing.

Note that the return point should preferably be non-pressurized. - Contact C.C.JENSEN in case this is not possible.

### FILTER INSERT

The CJC™ Filter Inserts consist of several discs bonded together. The material is wood cellulose.

### FILTRATION ABILITY

#### • Particle Removal

All CJC™ Filter Inserts have the following filtration degree:

- **3 µm absolute:**

98.7% of all solid particles > 3 µm

- **0.8 µm nominal:**

50% of all solid particles > 0.8 µm are retained in each pass.

The dirt holding capacity is 16-48 litres of evenly distributed solids.

#### • Degradation Products

Oxidation by-products, resin / sludge, and varnish are retained by the cellulose material. The cellulose will retain appr. 16-48 kgs of degradation products.



The CJC™ Fine Filter  
HTO HP 2 x 27/108 GP

### TECHNICAL DATA

Model HTO HP	1x27/108	2x27/108	3x27/108
Pump flow, std. / per hour	litr/gal	900-3400 / 238-989	
Pump type		GP	
Pump inlet pressure, max. *)	bar/psi	2 / 29	
Filter Insert 27/27	qty	4	8
Power consumption, aver.	kW	1.5	
Pressure drop, max.	bar/psi	2.0/29	
Fluid temperature, inlet, max.	°C/°F	300/572	
Dirt holding capacity, appr.	litr/gal	16/4.2	32/8.4
Dry weight	kg/lb	614/1354	1062/2342
Operating weight, wet	kg/lb	647/1426	1128/2487
Design pressure, filter	bar/psi	4/58	
Ambient temperature, max.	°C/°F	40/104	

\*) At higher pressures, a pressure reduction valve may be mounted

### GUIDING DIMENSIONING TABLE

System Volume Max. L / gal	CJC™ HTO HP Filter Type	Dirt Holding Capacity L / gal	Pump Flow L/gal per h
10,000 / 2,642	HTO HP 1 x 27/108 GP	16 / 4	900 / 238
20,000 / 5,283	HTO HP 2 x 27/108 GP	32 / 8	1700 / 449
40,000 / 10,567	HTO HP 3 x 27/108 GP	48 / 13	3400 / 898

### APPLICABLE FILTER INSERTS

Type	Application for
F	Heat transfer oil



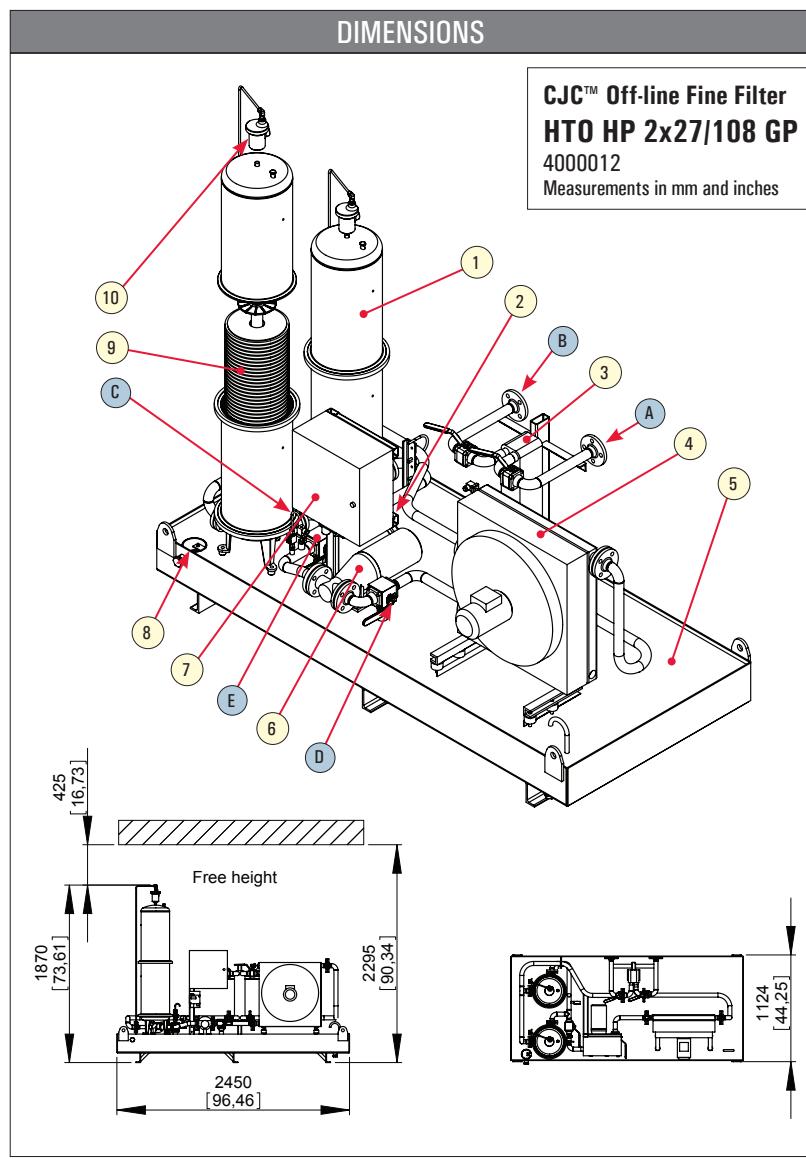
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## CJC™ Off-line Fine Filter for Heat Transfer Oil

### CJC™ Product Sheet

COMPONENTS	
Item	Part
1	Filter House
2	Pressure gauge
3	Heat exchanger
4	Air blast cooler
5	Tank
6	Pump
7	Control box
8	Leak protection
9	Filter insert
10	Automatic air vent
A	Oil inlet DN32 1 1/4"
B	Oil outlet DN32 1 1/4"
C	Sampling point
D	3-way-valve
E	Drain valve



### INSTALLATION PRINCIPLE

