



Product Sheet

APPLICATION

The HDU 427/- series of CJC® Off-line Fine Filters are used for the maintenance of fluids for **power transmission, lubrication, cooling and quenching**. The HDU 427/54-108 is ideal for removal of **degradation products, particles, and water**.

FUNCTION

The filter pump draws fluid from the system tank (at lowest point) and presses it through the filter insert. From the centre of the inserts the fluid flow through the filter base and returns to the tank.

The pressure drop over the filter - and consequently the contaminant absorption of the filter inserts - are monitored on the pressure gauge on the filter housing. The filter outlet port is placed in the filter base. The filtered fluid should be returned to the tank close to the suction pipe of the main system pump.

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

THE FILTER PUMP

The filter pump is a gear wheel pump. The electric motor can be supplied for all standard AC and DC voltages.

FILTER INSERT

The CJC® Filter Inserts consist of several discs bonded together. The material is either cellulose or cotton linters depending on the fluid to be filtered.

OPTIONS

- Preheater
- Tank
- Drip pan
- Control box
- Pressure switch

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 32-64 litres of evenly distributed solids.

• Degradation Products

Oxidation products, resin / sludge, and varnish are retained by the cellulose material, which will retain appr. 32-64 kgs of oil degradation products.

• Water Removal

The water absorption potential is up to 50% (i.e. 16,000-32,000 mL H₂O) of the total contaminant holding capacity.



The CJC® Fine Filter
HDU 427/108

TECHNICAL DATA

Model HDU:		427/54	427/81	427/108
Pump flow, per hour (std.)	ltr/gal	200 - 8000 / 53 - 2113		
Pump type		P/MZ/GP/GRN		
Pump inlet pressure, max.	bar/psi	0.5 / 7		
Filter Inserts 27/27	pcs.	8	12	16
Power consumption, aver.	kW	0.25 - 2.2		
Pressure drop, max.	bar/psi	1.8 / 26		
Oil temperature, max. *)	°C / °F	80 / 176		
Dirt hold. capacity, appr.	ltr/gal	32/8.5	48/12.6	64/16.9
Water absorption capacity	ltr/gal	16/4.2	24/6.3	32/8.5
Dry weight	kg/lb	430/948	490/1080	555/1224
Operating weight, wet	kg/lb	537/1184	645/1422	755/1664
Design pressure, filter	bar/psi	3 / 44		
Ambient temperature, max.	°C / °F	40/104		

*) The standard filters are designed for a max. temp. of 80°C / 176°F.
Other conditions, please contact us.

APPLICABLE FILTER INSERTS

Type	Application for
A:	Low flow (small system fluid volumes).
B:	Higher flow (larger system fluid volumes).
F:	Quenching oils. **)
BLA:	Water-based fluids and emulsions. **)

**) Does not hold water permanently



HDU 427/54-108

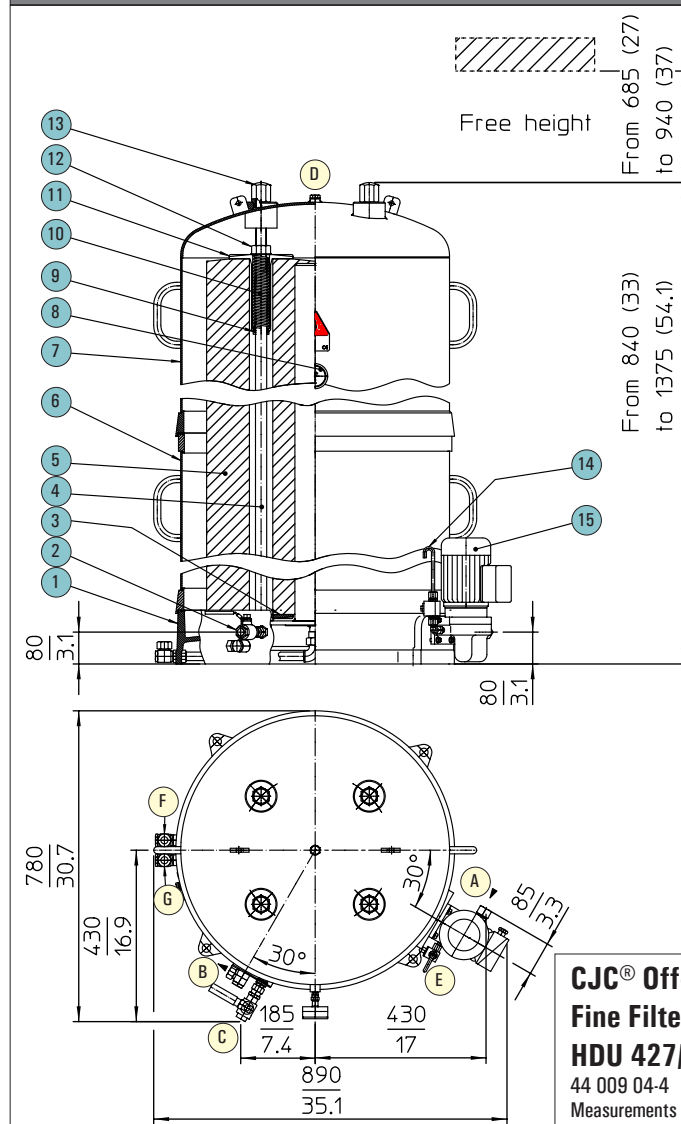
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COMPONENTS

Item	Part
1	Filter base
2	Drain valve
3	Filter plate
4	Stay bolt
5	Filter Insert
6	Cover
7	Filter housing
8	Pressure gauge
9	O-ring
10	Spring
11	Spring guide
12	Nut for spring
13	Top nut
14	Sampling point
15	Pump
A	ø18, Oil inlet
B	ø18, Oil outlet
C	1/2" BSP, Drain valve
D	1/4" BSP, Vent
E	Sampling point
F	ø18, Water outlet (only for H3 version)
G	ø18, Water inlet (only for H3 version)

DIMENSIONS



**CJC® Off-line
Fine Filter
HDU 427/54-108 P**
44 009 04-4
Measurements in
mm and inches

INSTALLATION PRINCIPLE

