



CLEAN OIL
BRIGHT IDEAS

HDU 427/54-108

CJC™ Off-line Fine Filter

CJC™ 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.



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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) |

