



CLEAN OIL  
BRIGHT IDEAS

# HDU 27/27-108

## CJC™ Off-line Fine Filter

### CJC™ Product Sheet

#### APPLICATION

The HDU 27/- series of CJC™ Off-line Fine Filters are used for the maintenance of fluids for **power transmission, lubrication, cooling and quenching**. The HDU 27/27-108 is ideal for removal of **particles, degradation products 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 insert the fluid flows through the filter base and returns to the tank.

The pressure drop over the filter - and consequently the contaminant absorption of the filter insert - is monitored on the pressure gauge on the filter top.

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 4-16 litres of evenly distributed solids.
- **Degradation Products**  
Oxidation products, resin / sludge, and varnish are retained by the cellulose material, which will retain appr. 4-16 kgs of oil degradation products.
- **Water Removal**  
The water absorption potential is up to 50% (i.e. 2,000-8,000 mL H<sub>2</sub>O) of the total contaminant holding capacity.



The CJC™ Fine Filter  
HDU 27/27 P

#### TECHNICAL DATA

| Model HDU                    |         | 27/27                 | 27/54  | 27/81   | 27/108  |
|------------------------------|---------|-----------------------|--------|---------|---------|
| Pump flow, per hour (std.)   | ltr/gal | 45 - 4000 / 12 - 1057 |        |         |         |
| Pump type                    |         | PV/P/MZ/GP            |        |         |         |
| Pump inlet pressure, max.    | bar/psi | 0.5 / 7               |        |         |         |
| Filter Insert 27/27          | pcs.    | 1                     | 2      | 3       | 4       |
| Power consumption, aver.     | kW      | 0.15-2.2              |        |         |         |
| Pressure drop, max.          | bar/psi | 1.8 / 26              |        |         |         |
| Oil temperature, max. *)     | °C/°F   | 80/176                |        |         |         |
| Dirt holding capacity, appr. | ltr/gal | 4/1.1                 | 8/2.1  | 12/3.2  | 16/4.2  |
| Water absorption capacity    | ltr/gal | 2/0.5                 | 4/1.1  | 6/1.6   | 8/2.1   |
| Dry weight                   | kg/lb   | 60/132                | 80/176 | 97/214  | 117/258 |
| Operating weight, wet        | kg/lb   | 68/150                | 97/214 | 122/269 | 150/331 |
| Design pressure, filter      | bar/psi | 4 / 58                |        |         |         |
| 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 and diesel oils. **)            |
| BLA:  | Water-based fluids and emulsions. **)          |
| BLDA: | Glycol-based flame proof hydraulic fluids. **) |

\*\*) Does not hold water permanently.



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| COMPONENTS |   |
|------------|---|
| Item       | Part  |
| 1          | Sampling point                                    |
| 2          | Plug  |
| 3          | Drain valve                                       |
| 4          | Filter plate                                      |
| 5          | Relief valve                                      |
| 6          | Pump  |
| 7          | O-ring  |
| 8          | Filter Insert                                     |
| 9          | Spring guide                                      |
| 10         | Filter housing                                    |
| 11         | Pressure gauge                                    |
| 12         | Top nut   |
| 13         | Vent screw  |
| 14         | Nut for spring                                    |
| 15         | Spring  |
| 16         | Cover   |
| 17         | Filter base                                       |
| 18         | Stay bolt   |
| 19         | Plug  |
| A          | ø18, Oil inlet                                    |
| B          | ø18, Oil outlet                                   |
| C          | 1/2" BSP Drain valve                              |
| D          | 1/4" BSP Vent                                     |
| E          | Sampling point                                    |
| F          | 1/4" BSP, Connection for optional pressure switch |

