



Heavy Duty Filter, HD HDU 15/25

Offline Fine Filter for Severe Conditions

Product Sheet

APPLICATION

The CJC® Heavy Duty Filter, HD HDU 15/25 is used for maintenance of **diesel, hydraulic and lube oils** at mobile machinery, specially within the mining industry, working under severe conditions such as e.g. **excavators, dump trucks, drilling rigs, etc.**

BENEFITS

The CJC® HD HDU 15/25 is specially designed for **heavy vibrations and shocks** and gives you the following benefits:

- Avoid unexpected breakdowns
- Increase machinery uptime
- Reduce maintenance costs
- Extend oil and component life time
- Reduce environmental impact

FILTER INFO

The filter is mounted on a shock absorbed back-plate. To prevent leaks due to shocks/vibration, the filter is equipped with a minimes test-nipple for pressure readings (a pressure gauge prepared for minimes connection is included). Furthermore, the filter is equipped with a pressure switch.

The HD HDU 15/25 is ideal for removal of particles, degradation products and water.

FUNCTION

The filter pump draws fluid from the system tank (at lowest point) and pumps it through the filter insert. From the centre of the insert the fluid flows through the filter house and returns to the tank. The pressure drop across the filter insert - 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 is to be returned to the tank close to the suction pipe of the main system pump.

Note: The return point should be non-pressurized. Contact us if this is not possible.

FILTER PUMP

The filter pump is a CJC® gear wheel pump. The motor can be supplied as standard AC motors, 24 VDC, and as a hydraulic motor.

FILTER INSERT

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



The CJC® Heavy Duty Filter, HD HDU 15/25

TECHNICAL DATA

| | | Heavy Duty Filter HD HDU 15/25 |
|-----------------------------|---------|--------------------------------|
| Pump flow, per hour (std.) | L/gal | 30-250 / 8-66 |
| Pump type | | PV2 |
| Pump inlet pressure, max. | bar/psi | 0.5 / 7 |
| Filter Insert 15/25 | pcs. | 1 |
| Power consumption, aver. | kW | 0.18 |
| Pressure drop, max. | bar/psi | 1.8 / 26 |
| Oil temperature, max. *) | °C / °F | 80 / 176 |
| Dirt hold. capacity, appr. | L/gal | 1.5 / 0.40 |
| Water absorption capacity | L/gal | 0.75 / 0.20 |
| Dry weight, max. | kg/lb | 33 / 73 |
| Operating weight, wet, max. | kg/lb | 39 / 86 |
| 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.

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, 1.5 L of evenly distributed solids.
- **Degradation Products**
Oxidation products, resin / sludge, and varnish are retained by the cellulose material, which will retain appr. 1 kg of oil degradation products.
- **Water Removal**
The water absorption potential is up to 50% (i.e. 750 mL H₂O) of the total contaminant holding capacity.

APPLICABLE FILTER INSERTS

| Type | Application for |
|-------|--|
| A: | Low flow (small system fluid volumes) |
| B: | Higher flow - (larger system fluid volumes) |
| BG: | High viscosity and larger flows |
| 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 | Drain plug |
| 2 | Shock absorber |
| 3 | Back-plate |
| 4 | Filter housing |
| 5 | Filter insert |
| 6 | O-ring |
| 7 | Stay bolt |
| 8 | Spring guide |
| 9 | Spring |
| 10 | Nut for spring |
| 11 | Cover |
| 12 | Vent screw |
| 13 | Top Nut |
| 14 | Pressure gauge |
| 15 | Minimess |
| 16 | Motor |
| 17 | Sampling point |
| 18 | Pressure switch |
| 19 | Pump |
| A | 3/8" BSP, Oil inlet |
| B | 3/8" BSP, Oil outlet |
| C | Drain plug |
| D | Vent screw |
| E | Sampling point |

