# 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 $^{\odot}$  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 minimess test-nipple for pressure readings (a pressure gauge prepared for minimess connection is included). Furthermore, the filter is equipped with a pressure switch.

The  $\overline{\text{HD}}$  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  $CJC^{\otimes}$  gear wheel pump. The motor can be supplied as standard AC motors, 24 VDC, and as a hydraulic motor.

#### **FILTER INSERT**

The  $CJC^{\odot}$  Filter Inserts consist of several discs bonded together. Depending on the fluid to be filtered, the material is either cellulose or cotton linters.

### FILTRATION ABILITY

- Particle Removal
  - All CJC® Filter Inserts have the following filtration degree:
    - 3  $\mu$ m absolute: 98.7% of all solid particles > 3  $\mu$ m
  - **0.8 \mum nominal:** 50% of all solid particles > 0.8  $\mu$ m 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  $\rm H_2^{}0)$  of the total contaminant holding capacity.



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  $80\,^{\circ}$  C /  $176\,^{\circ}$  F. Other conditions, please contact us.

APPLICABLE FILTER INSERTS		
Туре	Application for	
A:	Low flow (small system fluid volumes)	
B:	Higher flow - (larger system fluid volumes)	
BG:	High viscocity and larger flows	
BLA:	Water-based fluids and emulsions *)	
BLDA:	Glycol-based flame proof hydraulic fluids *)	

<sup>\*)</sup> Does not hold water permanently

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## **Product Sheet**

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	
Α	3/8" BSP, Oil inlet	
В	3/8" BSP, Oil outlet	
С	Drain plug	
D	Vent screw	
E	Sampling point	



