

PTU 15/12 Compact Filter Separator

CJC® Filter Separator, Compact Design

APPLICATION

The **CJC® PTU 15/12 Compact Filter Separator** - with integrated electric motor and pump- is used for maintaining clean and dry oil such as **hydraulic oils, gear oils, diesel incl. low sulphur diesel and food grade oils** with a specific weight lower than that of water.

The PTU 15/12 is ideal for **separation of free water from oil, removal of particles and oil degradation products**, in applications such as:

- Mobile Machinery
- Compact Hydraulic Systems

FUNCTION

The filter pump draws oil, e.g. from a tank and pumps it through the filter insert. From the centre of the insert the oil flows down into the coalescer where water droplets will settle in the bottom of the coalescer housing (bottom chamber). From the top of the coalescer the oil will flow back to the tank system.

The water is collected in the bottom of the coalescer housing and is drained manually (standard). Optionally a capacitive water sensor can be mounted for indicating the water level.

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

The filter outlet port is placed in the filter base. The filtered oil should be returned to the tank close to the suction pipe of the main system pump.

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

THE FILTER PUMP

The filter pump is a gear pump. Available with standard shaft seal or enclosed magnetic couple. Diesel version only available as magnetic couple. The electric motor can be supplied as AC or DC motors. IP class: IP55.

FILTER INSERT

The CJC® Filter Inserts consist of several discs bonded together. The material is cotton linters (cellulose).

FILTRATION ABILITY

• Water Removal by Separation

The CJC® Filter Separator removes water from oil to very low levels. The efficiency of water removal depends on the oil type and temperature.

• 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 0.75 litres of evenly distributed solids.

• Degradation Products

Oxidation products, resin / sludge, and varnish are retained by the cellulose material, which will retain appr. 0.5 kg of oil degradation products.



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TECHNICAL DATA

Model	PTU 15/12	
Pump flow, per hour (std.)	ltr/gal	20-120 / 5.3-32
Pump inlet pressure, max.	bar/psi	1 / 14.5
Filter Insert 15/12, std.	pcs.	1
Power consumption, average	kW	0.06
Pressure drop, max.	bar/psi	1.8 / 26
Oil temperature, max.	°C/°F	80 / 176
Dirt holding capacity, appr.	ltr/gal	0.75 / 0.2
Coalescer housing capacity	ltr/gal	0.75 / 0.2
Dry weight	kg/lb	15 / 33
Operation weight, wet	kg/lb	17 / 37
Design pressure, filter	bar/psi	4 / 58
Ambient temperature, max.	°C/°F	40 / 104

APPLICABLE FILTER INSERTS

Type	Application for
BLA:	Hydraulic oils, gear oils, diesel, food grade oils *)

*) Does not permanently hold water

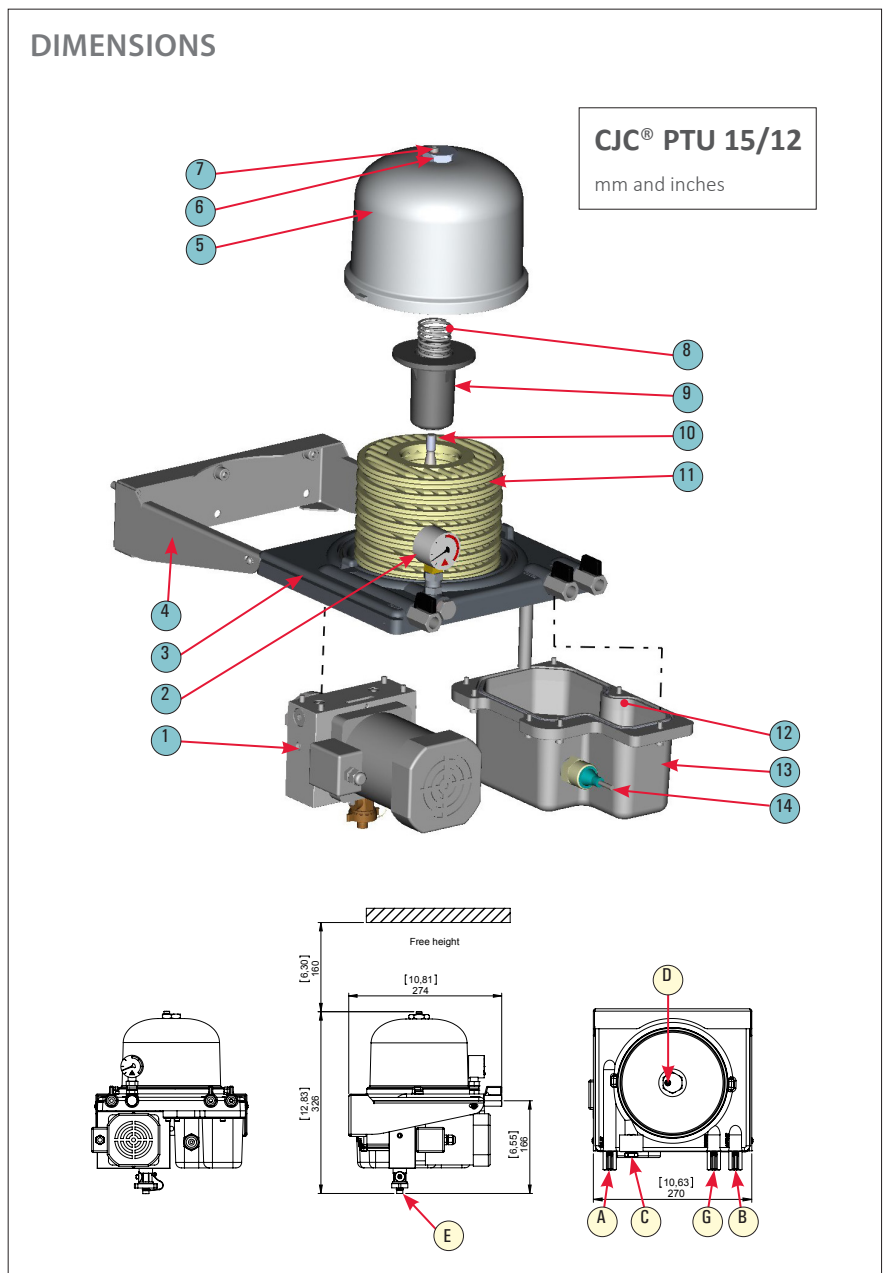
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COMPONENTS

Item	Part
1	Pump
2	Pressure gauge
3	Base
4	Mounting plate
5	Filter housing
6	Top nut
7	Air vent
8	Spring
9	Spring guide
10	Stay bolt
11	Filter insert
12	Coalescer element
13	Coalescer housing
14	Capacitive water sensor
A	Oil inlet 1/4" BSP
B	Oil outlet 1/4" BSP
C	Drain 1/4" BSP
D	Air Vent
E	Sampling point
G	Water outlet 1/4" BSP

DIMENSIONS



INSTALLATION PRINCIPLE

